



Qguard NVR/CMS

ANVR832/ANVR864

USER MANUAL



Version 2.0

About this user manual

Before installing and using this NVR unit, please read this user manual carefully.

Be sure to keep it handy for later reference.

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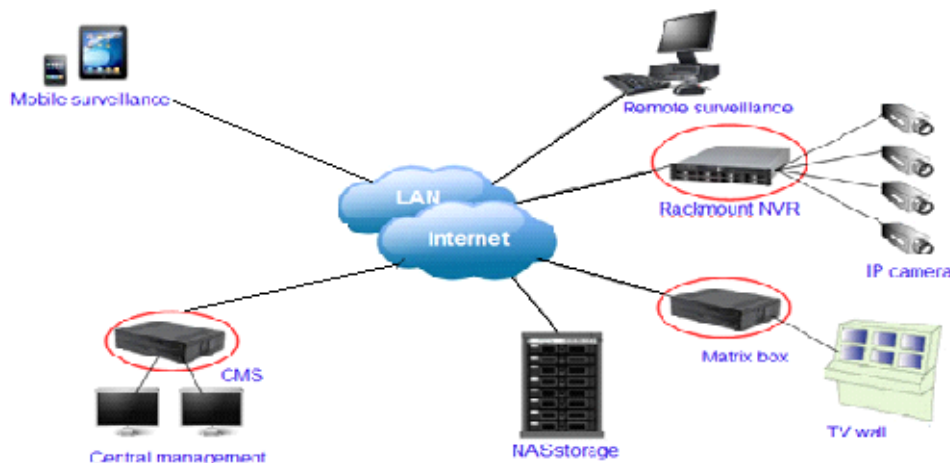
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Chapter 1 Introduction

1.1 Overview

Arlotto 32/64 channel Linux NVR server series is powered by newest 64-bit embedded Linux and Intel® GPU HW decoding technologies with superior stability and performance. Equipped with 8-bay hot-swappable SATA II 3.5" hard disk trays and automatic RAID-5 mode, this NVR system can support most all Arlotto IP cameras for up to 64CH video recording and let you access your recordings quickly and reliably. With Arlotto NVR series, customers can rapidly deploy their IP surveillance application with optimum surveillance and operating efficiency and delivers a better security and stability than the counter-part Windows® powered system.

Application Architecture



Key Feature

- Enhanced 64-bit Linux OS, well-protection against viruses and hackers
- Intel® GPU 1080P, 400FPS hardware H.264 decoding
- H.264, MPEG-4 and M-JPEG compression
- Max. 32/64-CH IP cameras recording(supports 5 Megapixel IP camera)
- Optical and digital PTZ for live view and playback
- Dual streaming for recording and local/remote/mobile live view
- NVR software pre-installed on DOM module for rapid system deployment
- Support analog and SDI digital capture board for hybrid applications
- CMS and iOS/Android mobile surveillance support

Hardware Specification

ANVR832	ANVR864
	
Rack mount NVR	
32CH	64CH
Intel®Q67	
Intel Core i7-2600 3.4GHz,8M cache	
VGA*1 , DVI *1 , HDMI*1	
Audio input*1, Audio output*1	
USB2.0 : Front*2, Rear*4	
RS232 x 1 , RS232 / 422 / 485(internal) x 1	
Gb Ethernet LAN x 2	
8 hot-swap SATA bay	
Above 2 HDD RAID 5	
600W ATX / AC 100~240V	
535.2mm (W)*440.9mm (D)*88.1mm(H)	

Software Specification

Camera Support - Supported Arlotto and Axis IP Cameras - IP cameras auto discovery within LAN - Video Compression: H.264/ MPEG-4/ M-JPEG - Video Resolution: Up to 5 Megapixel - Video Streaming: dual streaming with compression, resolution, frame rate, bit rate/quality, brightness, contrast, hue, saturation and sharpness settings - Channels Support (Recording): allows for up to 32/64CH megapixel IP camera recording - Audio: synchronized audio and video recording, two-way audio	Remote Playback - Playback Mode: Max. 4CH playback - Playback Mode: 1, 2X2 view mode - Search Mode: By timeline - Playback Control: Play, pause, reverse play, previous key frame/next frame, speed control(1, 2,4, 8. 16), video snapshot, digital zoom and audio control - Export: Convert recording video to AVI, ASF or MKV format and export to external USB device Event Management - Monitor video motion, digital input, camera disconnected, video loss, storage full, hard disk failure,
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Recording

- Recording Speed: Max. 64CH, 1920FPS/HD recording
- Recording Mode: Continuous/motion/alarm recording, multiple continuous/motion/alarm recording schedules
- Recording Buffer: Adjustable for pre-event recording and post-event recording, recycle HDD and keep video days

Dual Local Monitor

- Clone mode, two live view mode, live view + playback mode

Local live view

- Display Speed: Max. 32/64CH, 400FPS/HD real-time monitoring
- Display Mode: 1, 2X2, 3X3, 3X4(or 4X4), 6x6, 8X8, sequential and event video view mode
- Display Resolution: 1920X1080
- Display Control: video snapshot, optical PTZ/digital PTZ control and audio control
- OSD information: camera name, date/time, record/event status

Local Playback

- Playback Speed: Max. 16CH playback
- Playback Mode: 1, 2X2, 3X3, 3X4(or 4X4) view mode
- Search Mode: By timeline, motion
- Playback Control: Play, pause, reverse play, previous frame/next frame, speed control(1, 2,4, 8. 16), video snapshot, digital zoom and audio control
- Export: convert recording video to AVI, ASF or MKV format and export to USB storage

Remote Live View

- View Mode: 1, 2X2, 3X3, 3X4 (or4X4), 8X8 and sequential display from multi-site NVR servers simultaneously
- OSD information: camera name, date/time, record/event status
- View Control: Full screen display, original video aspect ratio, video snapshot, optical PTZ/digital PTZ control and audio control
- Device Tree: Tree View listing and management

backup failure, system boot-up, system shutdown and system configuration changed events within specified time.

- On-screen event alert, event log, digital output, email alert with attached recording video alert actions can be activated when an event is triggered

Backup

- Backup recording video of previous day to ftp server

System

- Support USB and network firmware upgrade and patch
- Support remote system shutdown and reboot
- Support remote console management

Security

- Authority Management: four-level privilege, different user rights can be assigned to different users
- Event Logs: detailed event logs
- User Logs: record of the users currently logged on and previously logged on to the NVR
- Software License Manager

Disk Management

- Support HDD S.M.A.R.T. to monitor hard disk drives status
- With more than 3 HDD redundant automatic storage with RAID-5 HDD mode, less than 3 HDD no RAID.

Network

- Dual streams: high resolution stream for recording and low bandwidth stream for local, remote or mobile live view
- Protocol: HTTP, DHCP, Static IP, DNS, PPPoE, DDNS, FTP, NTP, RDATE, SSH, UPnP and SMTP
- Timeout period for idle remote client to automatic log off
- Outgoing Bandwidth Limit

Utility

- NVR setup wizard (discovery NVR, NVR network setting and quick setup IP Camera)
- Windows remote client, iPhone/iPad client and Android client

iPhone/iPad and Android app

- 1, 4 screen division
- Two-way audio
- HD live view and event video playback

- | | |
|--|--|
| <ul style="list-style-type: none"> - Event Control: Event List, Digital Input status and digital output control | <ul style="list-style-type: none"> - Event push notification - Snapshot for evident - PTZ, ePTZ control |
|--|--|

1.2 Product Components

The package contains the main unit and its components as specified below. When you purchase the NVR, please check to ensure the components specified below are included.

- The NVR unit
- Screws for disk drives
- Power cord
- Warranty card with Serial Number
- Setup Wizard, Windows® Remote Client, iPhone® app, iPad® app and Android® app

1.3 Front Panel

Front view with Panel



HDD Activity

Indicates the hard drives' activity.

Power Status

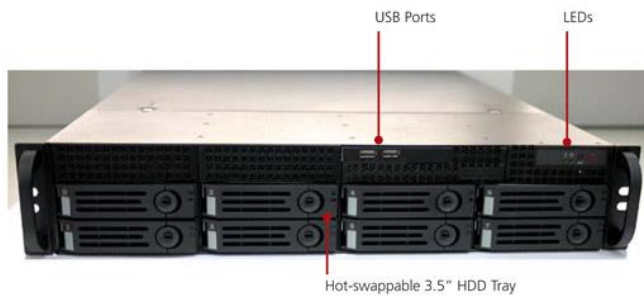
Indicates the system's power status.

Safety Lock

Key lock to secure the front panel and protect the hard drives.

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Front view without Panel



USB Ports

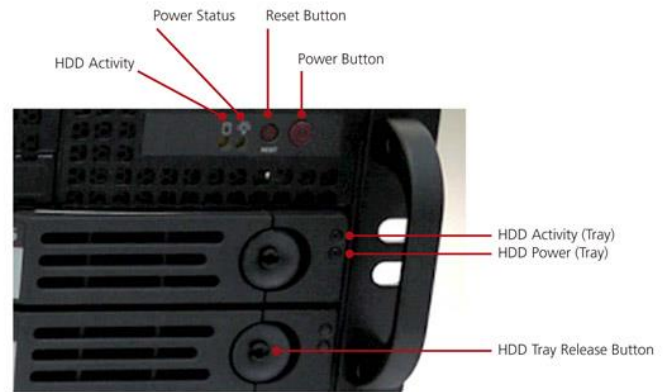
Used to connect USB2.0/1.1 devices.

Hot-swappable 3.5" HDD Tray

Hard drives trays to install hard drives on.

LEDs

Indicate the power status and HDD activity.



HDD Activity

Indicates the hard drives' activity.

Power Status

Indicates the system's power status.

Reset Button

Restarts the system.

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1.4 Rear Panel

Rear view



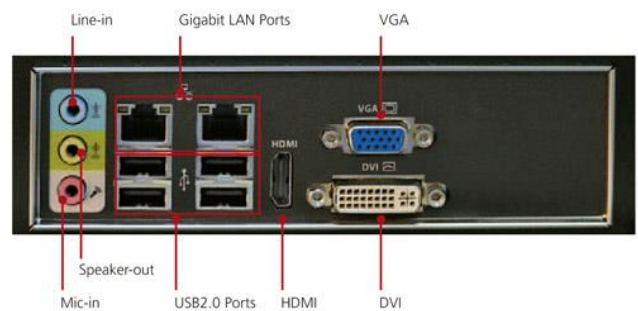
Power Supply

Location of internal power supply and fan.

AC Power Socket

Plug AC power cord here before turning on the system.

Rear view in detail



Speaker-out

Speaker-out jack to connect speakers or headphones.

Line-in

Line-in jack for audio input.

Mic-in

Mic-in jack to connect microphones.

Gigabit LAN Ports

Dual Ethernet ports to connect the device to a local area network.

USB2.0 Ports

Four USB2.0 ports to connect the system to USB2.0/1.1 devices.

Chapter 2 Installation

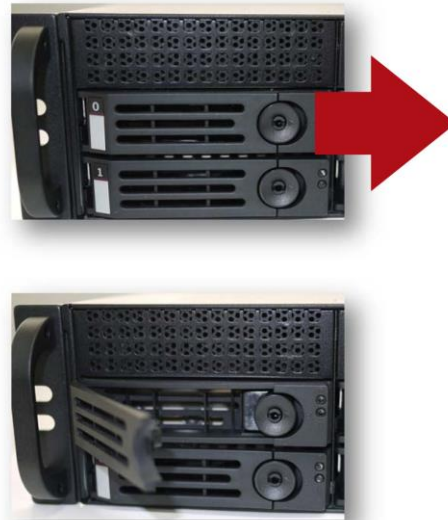
2.1 HDD Installation

1. Remove the front cover, open the HDD tray and mount the hard drive

Installing a SATA Hard Drive

1. Press down and hold the push button to remove the front panel.

2. Pull the eject button towards right to release the latch.



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2. Mount the hard drive into the HDD tray with screws. 4 screws for each tray, rotate clockwise to fix it.

3. Grab the latch and pull it gently to remove the HDD tray.



4. Loosen the screws on both sides of the tray and remove the dummy tray.



3. Put the HDD tray back.

5. Place the SATA hard drive into the tray, and tighten the screws on both sides to secure the hard drive.



6. Insert the hard drive tray back to the empty slot, and push the latch gently until a click sound is heard to secure the tray.



Note: Please install HDDs with the same model and storage capacity for easily maintenance.

2.2 Hardware connection

1. Connect one end of the network cable to the gigabit network port.

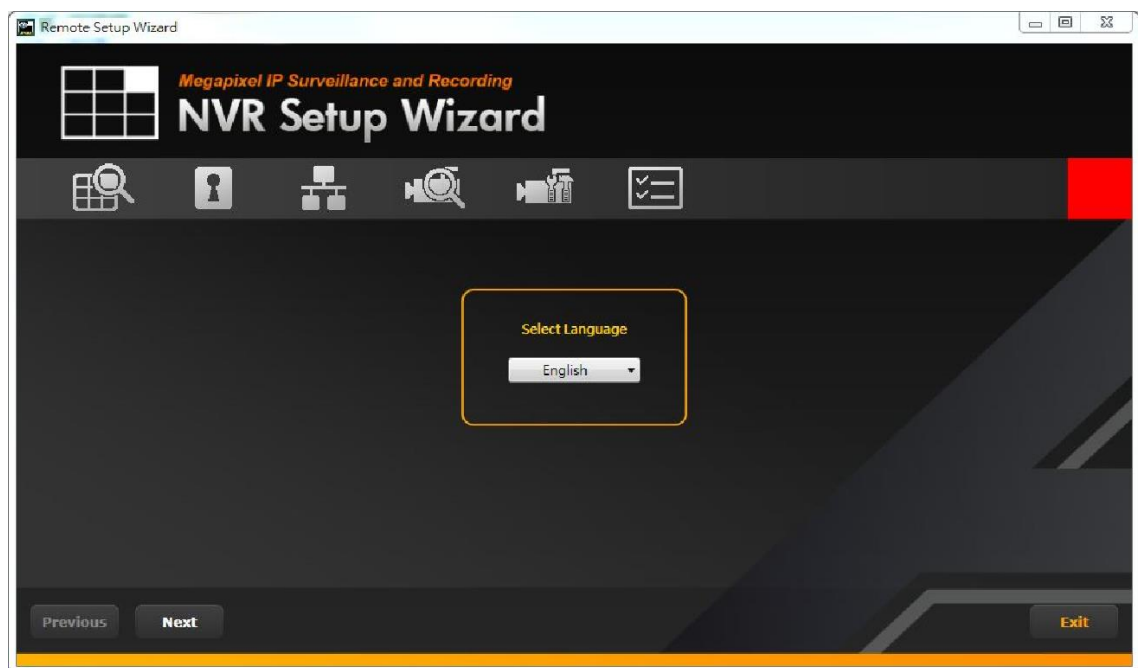
Note: Make sure network port is connected to the network via network cable. They will obtain IP addresses automatically via DHCP by default. You must enable the DHCP function within your network, as the NVR unit will retrieve an IP address through. (The IP Address and Netmask will default to 192.168.1.200, 255.255.255.0 for eth0 and 192.168.1.201, 255.255.255.0 for eth1 in case of no DHCP server existed)

2. Connect the other end of the network cable to your Ethernet hub or switch.
3. Connect the power cord to the power source.
4. Connect the power cord to the rear panel of the NVR unit.
5. On the front panel of the NVR unit, click the power button.
6. It takes about one to two minutes for the NVR unit to fully power up. Once it is powered up, the Power LED will turn blue.

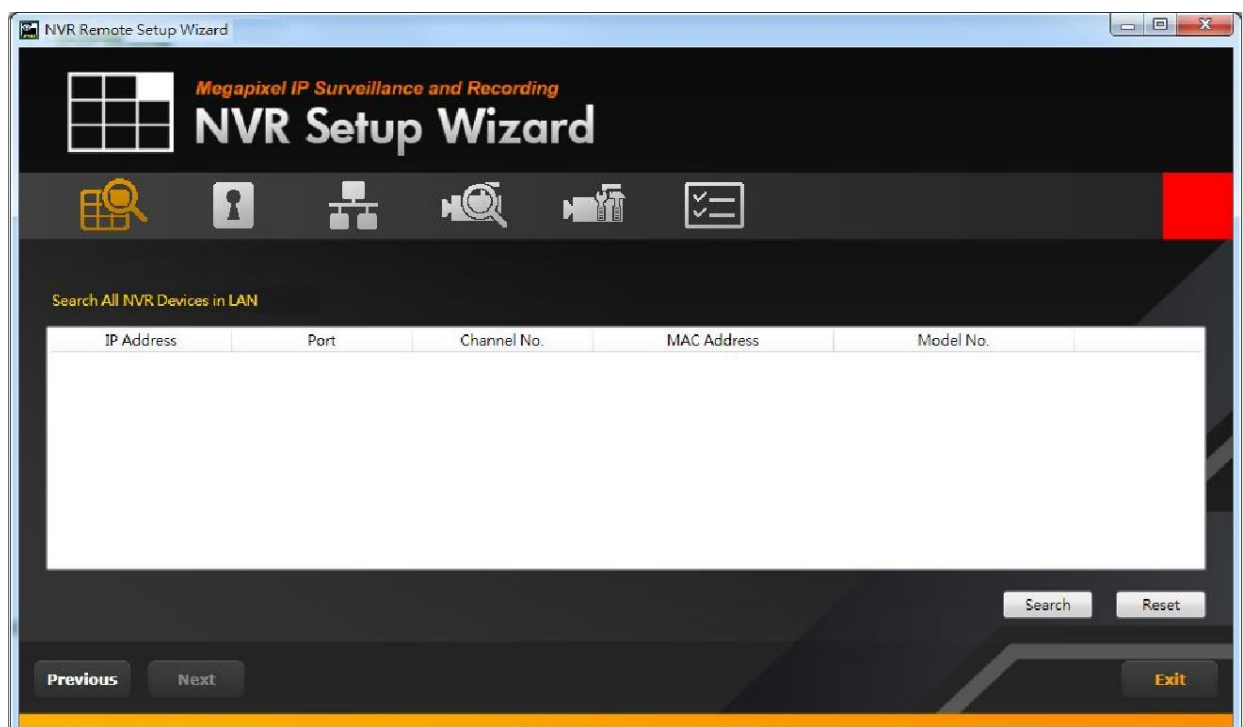
2.3 Setup NVR via Wizard

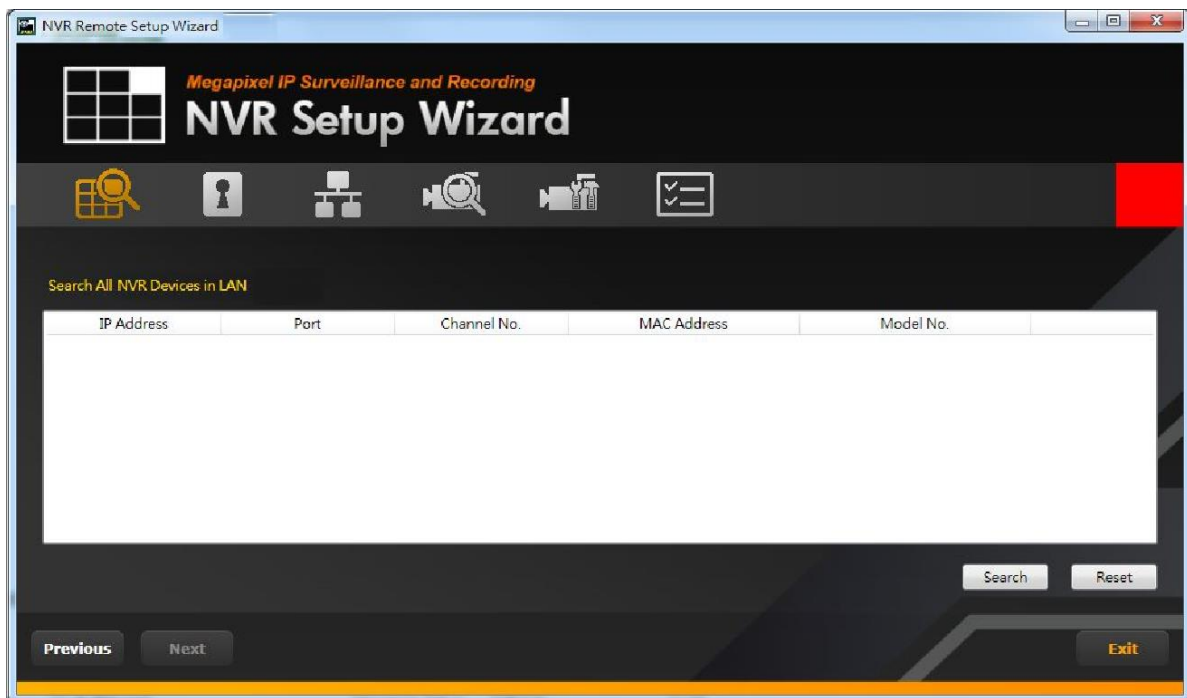
The NVR Setup Wizard (Setup Wizard program) performs the initial setup procedures on the NVR unit. After this procedure, you can begin access NVR via NVR local console or Windows® Remote client.

1. Get the NVR Client installation file.
2. Double-click NVR Client Installation.exe to begin installation.
3. Follow the instruction of NVR Client Installation.exe to install, or click the Exit button to close the installer.
4. Click the Start button -> NVR Remote Client -> Setup Wizard.

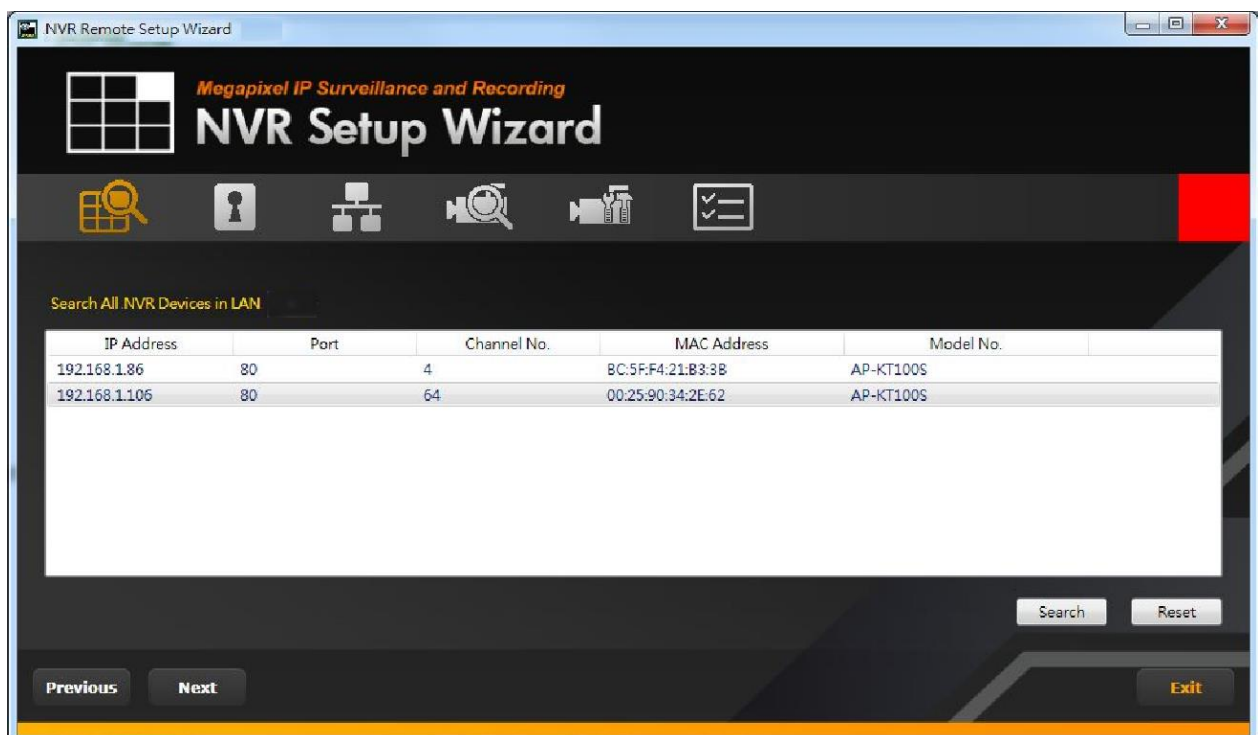


5. Choose your preferred language and then click the Next button (English, Japanese, Russian, Traditional Chinese)

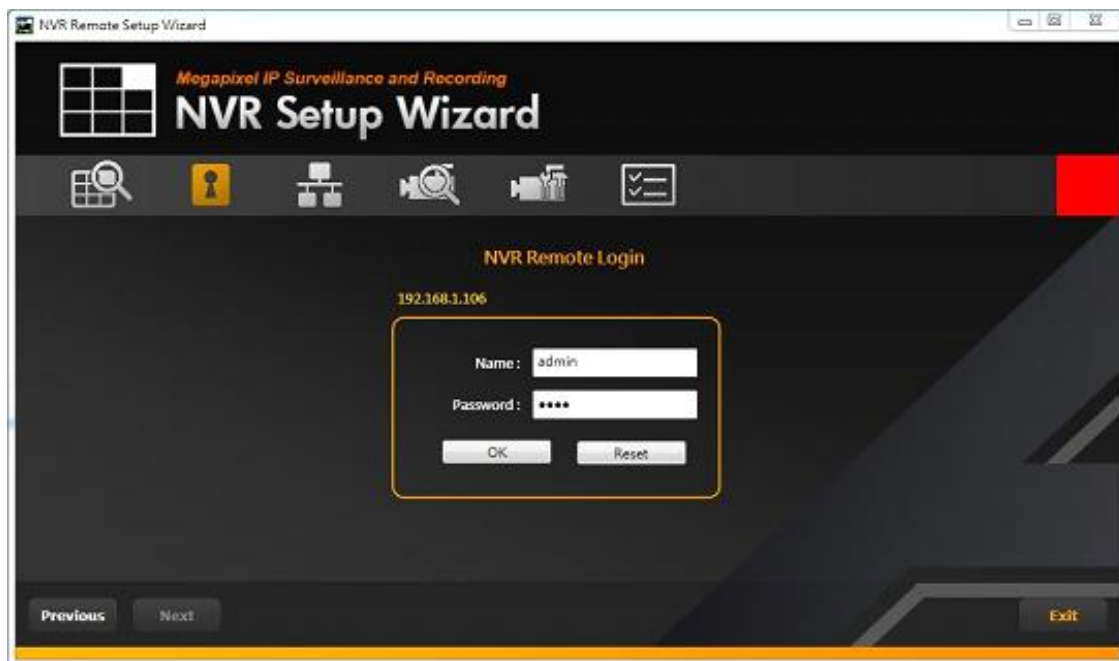




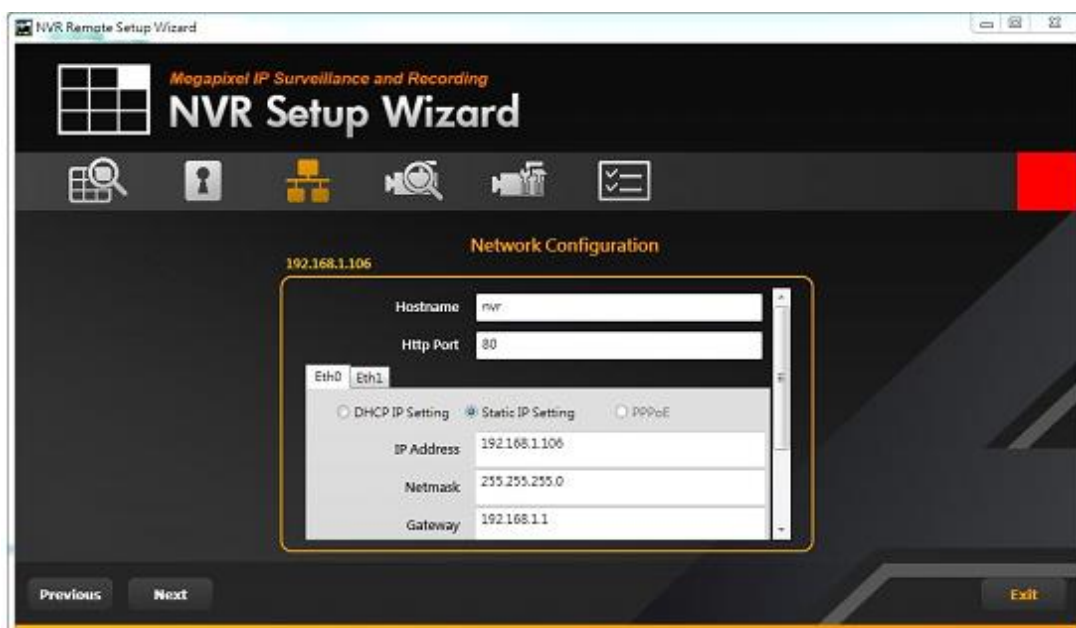
6. Click Search button, the NVR Setup Wizard will start searching for all the available NVRs on the LAN currently. Choose one of them, and then click the Next button.



7. Type in the admin password (**default is "1234"**), click the OK button and then click the Next button.

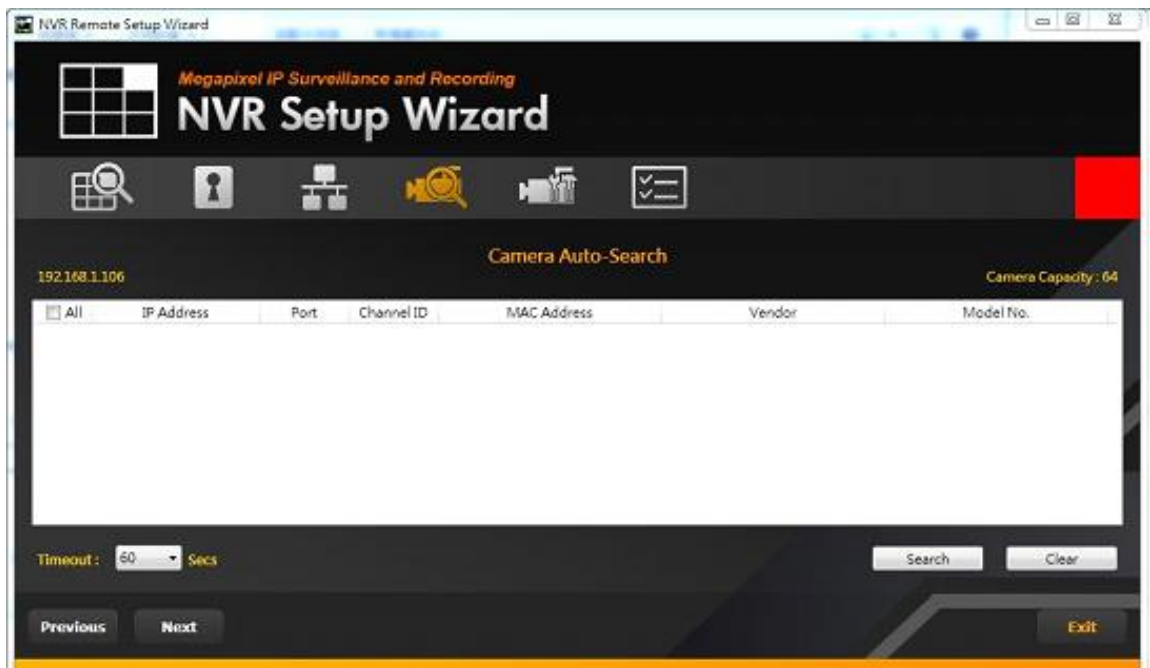


8. Type in the NVR hostname, http port (default is 80) and eth0/eth1 network setting, and then click the Next button.

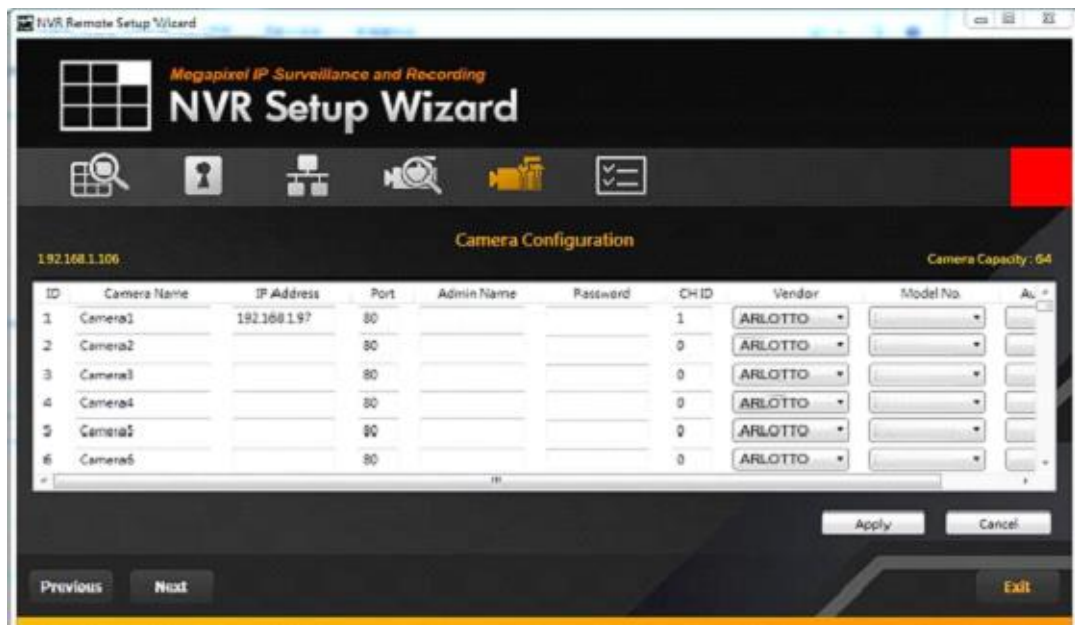


- DHCP IP Setting: obtain IP Address, Netmask, Gateway, Primary DNS Sever and Secondary DNS Server automatically via DHCP
 - Static IP Setting: configure IP Address, Netmask, Gateway, Primary DNS Sever and Secondary DNS Server manually.
9. Add cameras for this server. Click Search to automatically find all IP cameras on the LAN currently. (adjust the Timeout parameter of the left bottom if can't find any connected IP

camera, the default value is 60 seconds) Select the check box next to the desired IP camera or “All” for all IP cameras, and then click Next button.



10. Type in Admin Name and Password of searched IP camera or manually configuring the IP cameras for the Address, Port, Admin Name, Password, CH ID(video server only), Model No. and click Apply and then Next button.



11. click the Exit button to finish the settings procedure and activate the NVR unit.



Chapter 3 Getting Start

After the installation is done, you can begin to operate the NVR unit to monitor, playback the connected IP cameras and manage the functions of the NVR unit via local console.

3.1 Live Display Screen

Each time the NVR unit starts, the local console defaults to the live display screen. The following diagram outlines the functions used on the live display screen. You should become familiar with these options as this is the screen that will be displayed the majority of the time.

Live display screen



Camera view window

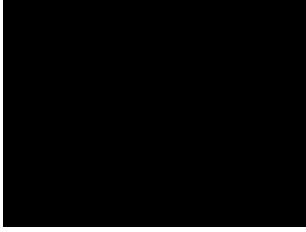


Camera view window displays camera title bar and its live video stream in a grid. The NVR supports different view modes for these grids, including single, quad, 9-split, 12-split, 16-split and 64-split view modes. Camera information will be shown on the camera title bar; it includes camera name, current date/time, motion alarm and recording status.

Icon	Description
	Camera is being recorded/not being recorded.
	Camera detects motion.

The camera title box and bounding box of camera view window will be shown in white color. It will change to orange color when it becomes as the focus window. Double-click left mouse button on a given grid will enlarge its size and double-click right mouse button on a given grid will reduce its size. The grid will show the live video stream of each IP camera in the normal case. The following background images will appear when abnormal status happens:

Image	Description
	This channel is trying to connect to IP camera.

	No response from IP camera. (Network failure or IP camera disconnected.)
	This channel is unused.

ePTZ

ePTZ allows you to zoom part of the video stream and enlarge it to display on the camera view window. Press left mouse button and drag a red rectangle over a grid, and then release left mouse button. The red area will be displayed in the full camera view window. Just press left mouse button and drag it within the grid to see other area and scroll the mouse wheel forward to zoom in and backward to zoom out. Double clicking right mouse button will terminate the digital magnifying procedure.

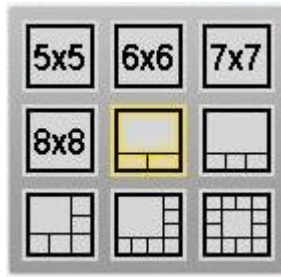
Task control bar for live display screen



The task control bar locates at the bottom side of live display screen, it will show or hide automatically when moves or leaves mouse to the bottom of the screen. It provides several buttons for easy operate your live display screen:

Icon	Description
	Press to logout system and enter the login screen, users can choose to login again or to shutdown the system.
	Press to enter playback screen.
	Press to enter system configuration screen.

	Press to take a snapshot from focused camera view window.
	Press to auto-switch camera views.
	Press to show PTZ panel
	Press to talk with camera
	Press to listen camera's audio.
	Dragging the bar to volume up or volume down or clicking the mute button to enter mute mode.
	Press to enter single view mode.
	Press to enter quad view mode.
	Press to enter 9-split view mode.
	Press to enter 12-split view mode.
	Press to enter 16-split view mode.
	Press to enter other split view modes, including 5x5, 6x6, 7x7, 8x8, 1+2, 1+3, 1+5, 1+7 and 1+12 split view modes.

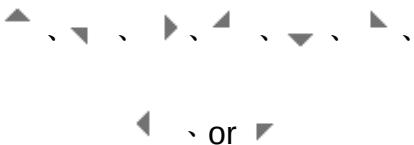


This LED panel shows the IP address, log in user, current connected user, current date/time, HDD mode and status.

PTZ panel



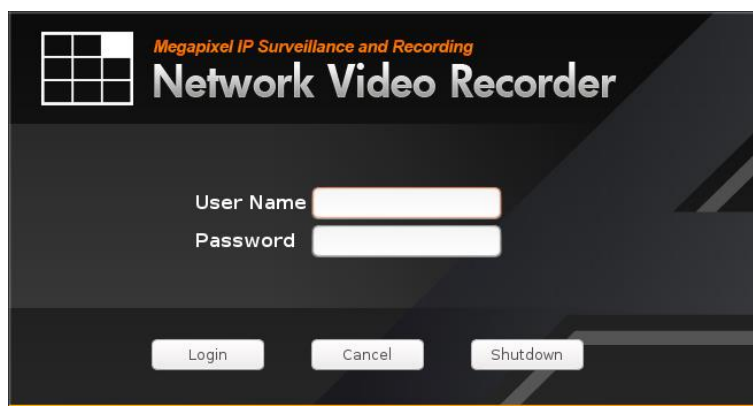
For PTZ camera, PTZ panel can control the direction, focal lengths, focus, iris, go to preset and speed of camera. Through camera view window, you can see the live video when navigate PTZ cameras, adjust IRIS, Focus, zoom in and zoom out.

Icon	Description
	Press arrow on the camera view window to adjust the TILT (up/down)/PAN (left/right) position.
	Press  /  to zoom in/zoom out the PTZ.
	Press  /  to adjust the PTZ focus.
	Press  /  to adjust the PTZ iris.
Speed	Press +/- icon to adjust the PTZ speed.
Preset	Press +/- icon to the preset point, then press Go to the preset point.

3.2 Login Screen

The local console is defaults auto-login to the live display screen. Users can disable " Auto

Login" mechanism and then press Login button to login the system, press Cancel button to cancel or press Shutdown button to shutdown the system by entering correct User Name and Password. (Note: The default administrator: User Name is admin, Password is "1234").



The image shows the login interface of a Network Video Recorder. At the top left is a logo consisting of a 3x3 grid of squares. To its right, the text "Megapixel IP Surveillance and Recording" is displayed in a small orange font, followed by "Network Video Recorder" in a large white font. Below this, there are two input fields: "User Name" and "Password". At the bottom, there are three buttons: "Login", "Cancel", and "Shutdown". The background is dark with some geometric patterns.

3.3 Playback Screen

This NVR has several search methods that allow the user to easily playback a particular section of recording video. The following describes how to operate these playback features.

Playback screen



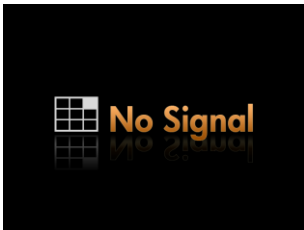
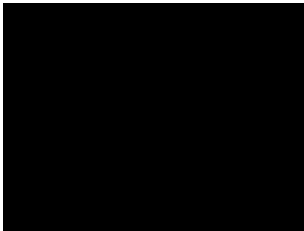
Playback view window



Playback view window displays camera title bar and its playback video stream in a grid. Camera information will be shown on the camera title bar, it includes camera name, playback date/time.

The camera title box and bounding box of playback view window will be shown in white color. It will change to orange color when it becomes as the focus window. Double-click left mouse button on a given grid will enlarge its size and double-click right mouse button on a given grid will reduce its size.

The grid will show the playback video stream of each IP camera in the normal case. The following background images will appear when abnormal cases happen:

Image	Description
	No recording clip for the IP camera.
	This channel is unused.

ePTZ

ePTZ allows you to zoom part of the playback video stream and enlarge it to display on the

playback view window. Press left mouse button and drag a red rectangle over a grid, and then release left mouse button. The red area will be displayed in the full playback view window. Just press left mouse button and drag it within the grid to see other area and scroll the mouse wheel forward to zoom in and backward to zoom out. Double clicking right mouse button will terminate the digital magnifying procedure.

Task control bar for playback screen



The task control bar locates at the bottom side of playback screen, it will show or hide automatically when moves or leaves mouse to the bottom of the screen. It provides several buttons for easy operate your playback screen.

Icon	Description
	Press to back to live display window.
	Press to quickly find playback video of a certain time period using timeline or motion search.
	Press to export video of a certain time period using timeline.
	Press to take a snapshot from focus playback view window.
	Press to listen camera's audio.
	Dragging the bar to volume up or volume down or clicking the mute button to enter

	mute mode.
	Press to enter single view mode.
	Press to enter quad view mode.
	Press to enter 9-split view mode.
	Press to enter 12-split view mode.
	Press to enter 16-split view mode.
	This LED panel shows the playback speed, playback date/time, HDD mode and status.

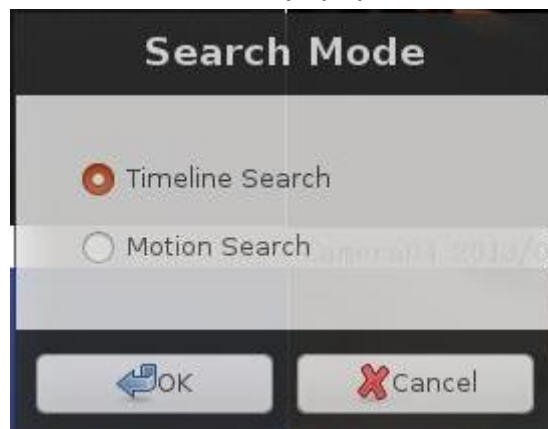
Timeline Search

There are several different types of search methods that can be performed on the NVR unit. The basic one is timeline search involves selecting the date, camera, time and then play.

1. Click the Search button



2. Select Timeline search from the Search Mode popup menu.



3. Click the Calendar button



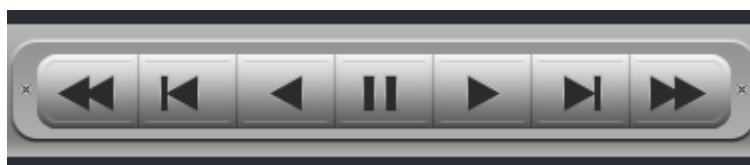
to pop up or pop down a calendar for selecting a date.



4. Select a time by dragging the red bar or clicking the left and right arrows to the right of the time display.



5. The  and  icons can zoom in and out the timeline scale.
6. Select one, more or all cameras.
7. Click OK to begin search and then the video can be played forwards, backwards, or frame-by-frame as following:



Icon	Description
	Press to increase backward speed at 1x, 2x, 4x, 8x and 16 x speeds.
	Press to back one frame.
	Press to rewind recorded video.
	Press to pause recorded video.

	Press to play recorded video.
	Press to forward one frame
	Press to increase forward speed at 1x, 2x, 4x, 8x and 16 x speeds.

Motion Search

When playback in single split mode, draw a motion detection area can search clips that detected motions within the search area.

1. Draw a motion detection area by pressing mouse left button and dragging an area. Click mouse right button can clear the area that just drew.

2. Click  icon to search the next clip

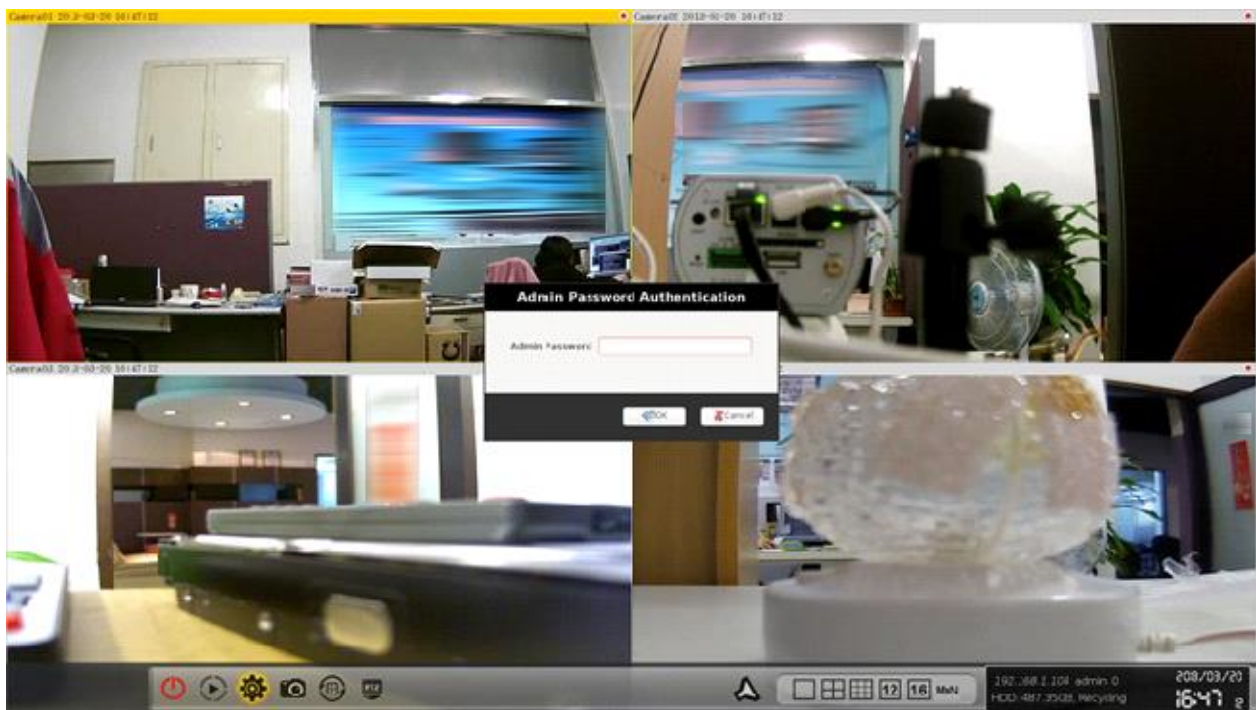
3.4 System Configuration Screen

The system configuration screen allows you to setup your NVR unit by adjusting settings like camera, network, system and license. It is extremely important that you setup your NVR correctly.

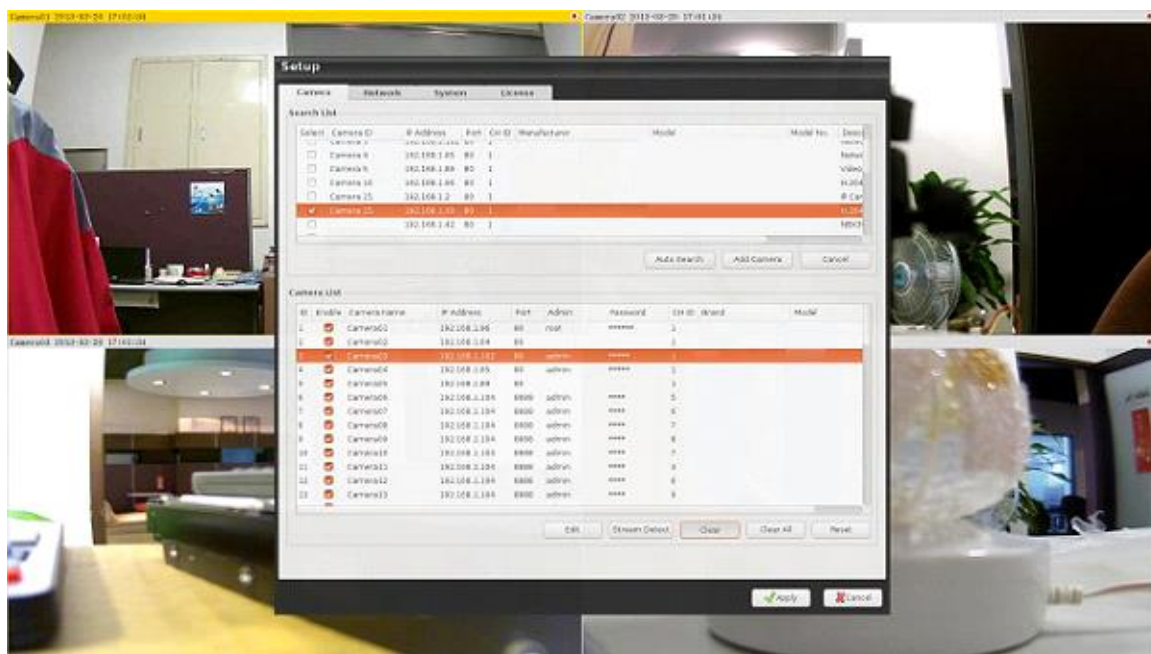
Camera setup



1. Click  button, (only administrator and power user has this permission)
2. Enter system configuration screen by typing in correct Password.



3. Click Auto Search button to list all the currently available cameras.
4. Select the check box next to the desired camera.
5. Specified the Camera ID for the desired camera.
6. Click Add Camera button to add it into Camera List or Cancel button to cancel the change.



7. Click an available camera on the Camera List.
8. Check Enable to active the video channel.

9. Modify the related column on the camera raw or click Edit to modify it furthermore.

The screenshot shows a 'Setup' window with four tabs: 'Camera', 'Network', 'System', and 'License'. The 'Camera' tab is active, displaying 'Camera Information' and 'Device' settings. Under 'Camera Information', there is a 'Camera Name' field with the value 'Camera02', a 'Camera Enable' checkbox checked and labeled 'Enable', and an 'Audio Enable' checkbox unchecked and labeled 'Enable'. The 'Device' section includes fields for 'IP Address' (192.168.1.102), 'Port' (80), 'Admin' (admin), 'Password' (masked with dots), 'Channel ID' (1), and dropdown menus for 'Vendor' and 'Model'. A 'Preview' window shows a live video feed of a modern interior. At the bottom, there are buttons for 'Stream Setup', 'Image Adjust', 'Reset', and 'Return'. At the very bottom right, there are 'Apply' and 'Cancel' buttons.

10. Click Stream Detect button to get IP camera's streaming setting.

11. Click Clear button to clear the selected raw or Clear All to clear all cameras setting.

12. Click Reset button to reset the related modifications.

13. Click Apply button to apply the change or Cancel button to cancel the change.

Camera streaming setting

Setup

Camera Network System License

Camera Information

Camera Name : Camera02

Camera Enable : ☒ Enable

Audio Enable : ☐ Enable

Device

IP Address : 192.168.1.102

Port : 80

Admin : admin

Password : *****

Channel ID : 1

Vendor :

Model :

Preview

Stream Setup

NVR Stream 1

IPCam Stream : Profile 1

☒ H.264 ☐ MPEG4 ☐ MJPEG

Resolution : 1280x720

Frame Rate : 15

Bitrate : 0

Quality : Very High

Stream Setup Image Adjust Reset Return

Apply Cancel

1. Click Stream Setup button.
2. Select a stream profile from the stream profiles drop-down menu for NVR Stream 1.
3. Change the default video codec (H.264, MPEG-4 or MJPEG), resolution, frame rate, bit rate/quality setting if needed. Click Submit button to save your changes to IP camera.
Note: The available values will vary by camera.
4. Click Apply button to apply the change or click Cancel button to cancel the change.
5. Check NVR Stream 2 if needed.
6. Select a stream profile from the stream profiles drop-down menu for Stream 2.
7. Change the default video codec (H.264, MPEG-4 or MJPEG), resolution, frame rate, bit rate/quality setting if needed. Click Submit button to save your changes to IP camera.
Note: The available values will vary by camera.
8. Click Reset button to reset the related modifications or Click Return button to return to previous page.
9. Click Apply button to apply the change or click Cancel button to cancel the change.

Camera image setting

Setup

Camera Network System License

Camera information

Camera Name :

Camera Enable : ☒ Enable

Audio Enable : ☐ Enable

Device

IP Address :

Port :

Admin :

Password :

Channel ID :

Vendor :

Model :

Image Adjust

Brightness : 48

Contrast : 0

Saturation : 37

Hue : 0

Sharpness : 50

Preview

Clicking the Image tab and then adjust the following sliders to change the camera image:

1. Click Image Adjust button.
2. Bright: move the Brightness slider bar to the right or left to adjust the brightness.
3. Contrast: move the Contrast slider bar to the right or left to adjust the lighting difference between dark and light areas of the image.
4. Saturation: move the Saturation slider bar to the right or left to adjust the overall color intensity of the image.
5. Hue: move the Hue slider bar to the right or left to adjust the color cast of the image.
6. Sharpness: move the Sharpness slider bar to the right or left to adjust the edge contrast of the image.
7. Click Submit button to save your changes to IP camera.
8. Click Default button to reset it to IP camera's default.
9. Click Reset button to reset the related modifications or Click Return button to return to previous page.
10. Click Apply button to apply the change or click Cancel button to cancel the change.

Network Setup

To connect NVR to LAN or Internet, you need to:

1. Enter the NVR Host Name, HTTP port (default is 80), Streaming port (default is 8888)

The screenshot shows the 'Basic Info' configuration page. It includes a 'Host Name' field with 'nvr' entered. Below it, the 'Port' section has 'Http Port' set to 80 and 'Streaming Port' set to 8888. To the right, the 'Others' section has two checked checkboxes: 'Enable SSH' and 'Enable UPnP'.

2. Enable SSH (for remote maintenance purpose).
3. If your NVR has two Ethernet ports, make sure both Ethernet ports are connected to the network first and then select dual-IP, Load Balancing or Fail-over mode for the TCP/IP setting:

The screenshot shows the 'TCP/IP' configuration page. At the top, there are three radio buttons: 'Dual-IP' (selected), 'Load Balancing', and 'Fail-over'. Below this, the 'ETH0' tab is active, showing three radio buttons: 'DHCP', 'Static IP' (selected), and 'PPPOE'. Under the 'Static IP' section, there are five input fields: 'IP Address' (192.168.1.104), 'Netmask' (255.255.255.0), 'Gateway' (192.168.1.1), 'Primary DNS Server' (empty), and 'Secondary DNS Server' (empty). At the bottom, there is a checkbox for 'Max Outgoing Bandwidth' followed by an empty input field and the unit 'Kbps'.

- A. Dual-IP: assign different IP settings for each Ethernet channel.

- B. Load-Balancing: aggregating two Ethernet channels together to form a single channel for network traffic sharing.
 - C. Fail-over: aggregating two Ethernet channels together to form a single channel for redundancy in Ethernet paths.
4. Select one of the following mechanisms to configure the Ethernet channels (eth0, eth1) of NVR:
- A. DHCP IP setting: obtain IP Address, Netmask, Gateway, Primary DNS Sever and Secondary DNS Server automatically via DHCP server (the IP Address and Netmask will default to 192.168.1.200, 255.255.255.0 for eth0 and 192.168.1.201, 255.255.255.0 for eth1 in case of no DHCP server existed)
 - B. Static IP Setting: configure IP Address, Netmask, Gateway, Primary DNS Sever and Secondary DNS Server manually.
 - C. PPPoE setting: Enter User Name and Password provided by ISP. The system will return the IP assigned by ISP in case of dialup successfully.
5. Specify Maximum Outgoing Bandwidth to restrict the amount of outgoing bandwidth of NVR uses.
6. DDNS (Dynamic Domain Name Server) allows you to connect NVR with dynamic IP address. You can refer to http://www.no-ip.com/services/managed_dns/free_dynamic_dns.html and register an account, and then:

Others

DDNS SMTP

☐ Enable

Domain Name

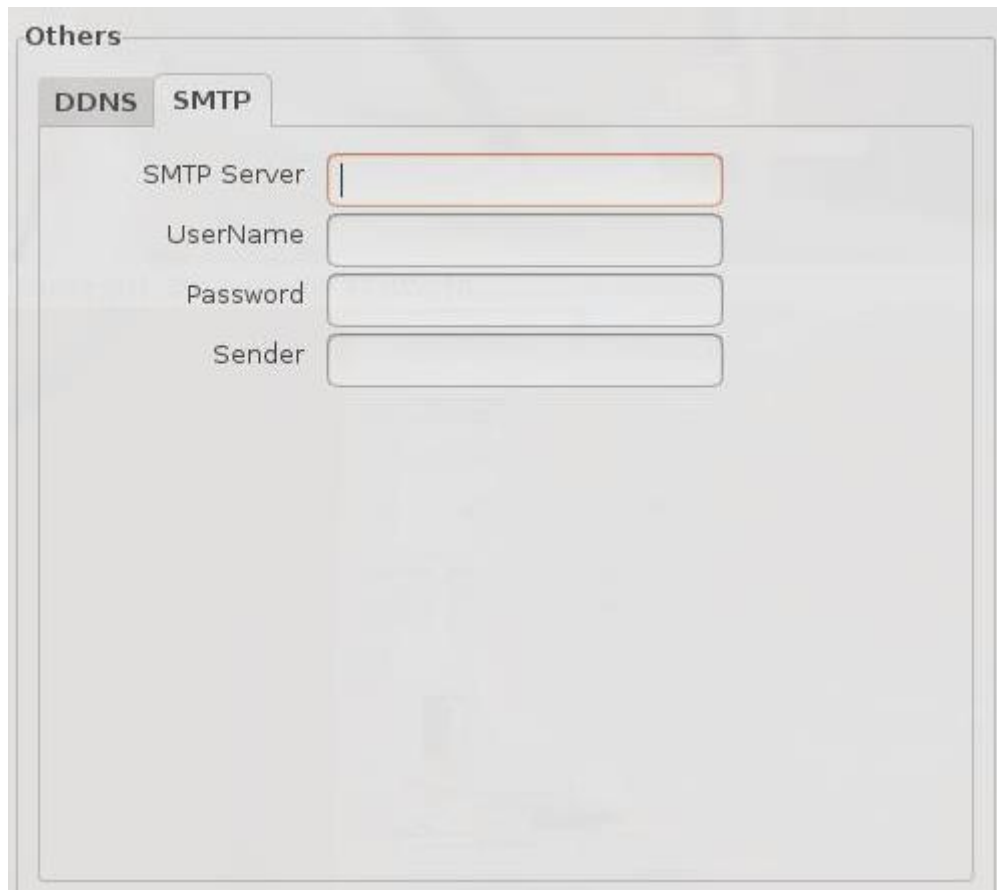
Provider

User Name

User Password

Update Period

- i. Enter your account in User Name field.
 - ii. Enter your password in User Password field.
 - iii. Select the Sync Period to setup interval for IP/DDNS synchronization.
 - iv. The domain name field will return your DDNS name assigned by no-ip when connect successfully.
7. Configure your SMTP here to send event notifications to the E-mail address specified in Event:

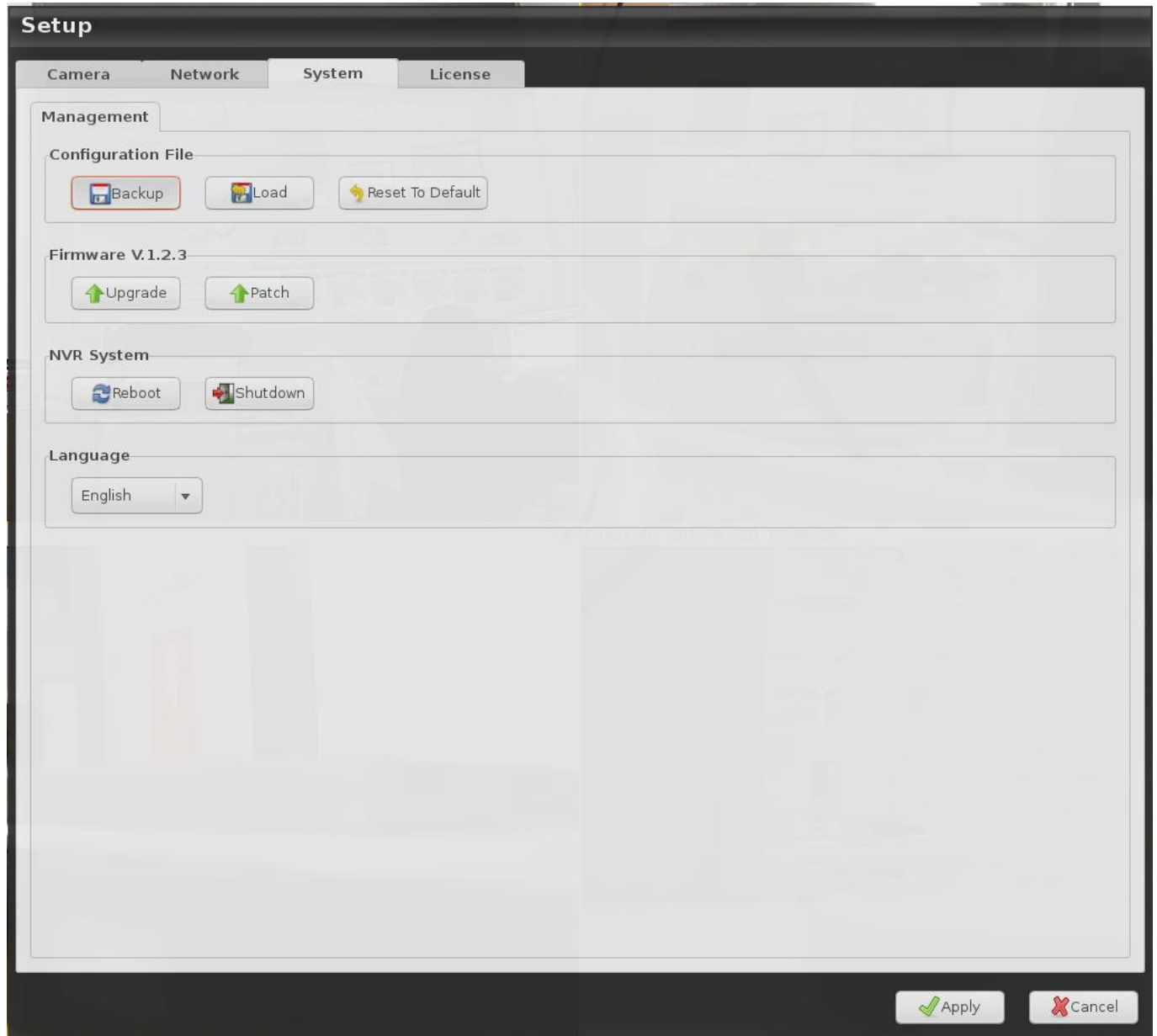


The image shows a screenshot of a web-based configuration interface. At the top, there is a tab labeled 'Others'. Below this, there are two sub-tabs: 'DDNS' and 'SMTP'. The 'SMTP' tab is currently selected. Inside the 'SMTP' tab, there are four input fields arranged vertically, each with a label to its left: 'SMTP Server', 'UserName', 'Password', and 'Sender'. The 'SMTP Server' field is highlighted with a red border. The other fields are empty.

- i. Enter your SMTP server.
 - ii. Enter User Name of SMTP server
 - iii. Enter User Password of SMTP server
 - iv. Enter the sender address of event notifications
8. Click Apply button to apply the change or click Cancel button to cancel the change.

System Setup

System setup supports NVR management features including: backup/restore configuration file, reset default configuration, upgrade firmware, reboot/shutdown NVR system and language setting.



Backup/Load Configuration

1. Click Backup/Load button.
2. Browse a destination/file for backup/load.
3. Click the OK button.
4. A confirmation dialog pops up.
5. Click the OK button to confirm and start backup/load.
6. After configuration load, the NVR will restart automatically.

Reset to Default Configuration

1. Click the Reset to Default button.
2. A confirmation dialog pops up.
3. Click the OK button to reset.
4. After configuration load, the NVR will restart automatically.

Upgrade firmware

1. Browse the firmware file for upgrading.
2. Click the OK button.
3. A confirmation dialog pops up.
4. Click the OK button to confirm and start upgrade.
5. After upgrade, the NVR will restart automatically.

Language setting

1. Select a preferred language.
2. Click Apply button to apply the change or click Cancel button to cancel the change.

License Setup

Register a license to have more channel capacity for NVR. (Max. 64 channels for each NVR)
Licenses can be registered to NVR in two ways: online and offline.

The screenshot shows the 'Setup' window with the 'License' tab selected. It contains a 'License List' table and a 'License Info' section.

Serial Number	Camera Capacity	Status
4a960a5d78168b6e	48	Registered
0ec9a23d5cf58475	16	Registered

License Info

☒ Online Register ☐ Offline Register

Serial Number: 4a96 0a5d 7816 8b6e
Host Info: 68c2 aa2a 8003 83e4
Random Number: 4ca9 0644
License Key: 87f1 05f4 f6cc 70d0

At the bottom right, there are 'Apply' and 'Cancel' buttons.

Online register

1. Select the Online Register on the License Info column.
2. Enter your Serial Number.
3. NVR will verify Host Info and Random Number and then obtain a License Key via Internet.
4. Click Apply button to register this license info.
5. System will reboot automatically if registered successfully.
6. The new License Info will be updated in License List.

Chapter 4 Windows® Remote Client

You can also operate the NVR unit via Windows® remote client to monitor, playback the connected IP cameras and manage the functions of the NVR system.

4.1 Login

Click the Start button -> NVR Client -> NVR Remote Client at your Windows® desktop. When the client is up, you will see the following login window.

Login window

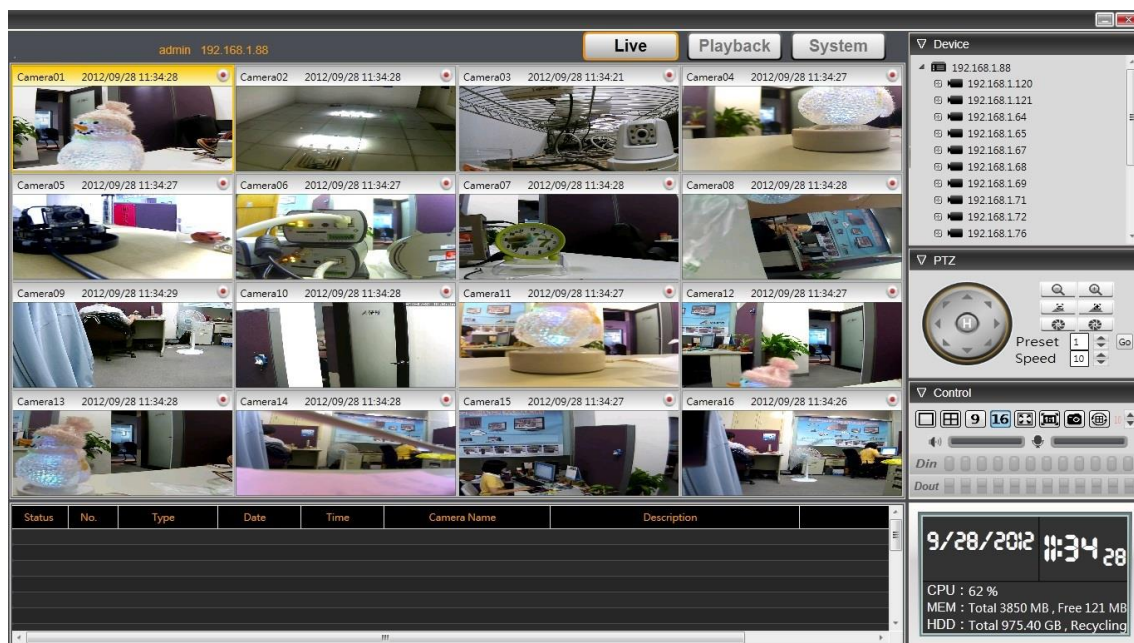


The screenshot shows the login window for a Network Video Recorder. The window title is "Megapixel IP Surveillance and Recording Network Video Recorder". It contains the following fields and controls:

- NVR Name :** A dropdown menu.
- IP :** A text input field.
- Port :** A text input field.
- User Name :** A text input field.
- Password :** A text input field.
- Language :** A dropdown menu currently showing "English".
- Resolution :** A dropdown menu currently showing "1366 x 768".
- Buttons:** "OK", "Clear", and "Exit" at the bottom right.

Login your NVR unit by entering its NVR Name, IP Address, Port No., User Name, Password, Language and Resolution and then click OK begin using this unit. (Note: The default administrator: User Name is admin, Password is "1234"). After entering the correct information, you will see the live display screen within 10 seconds.

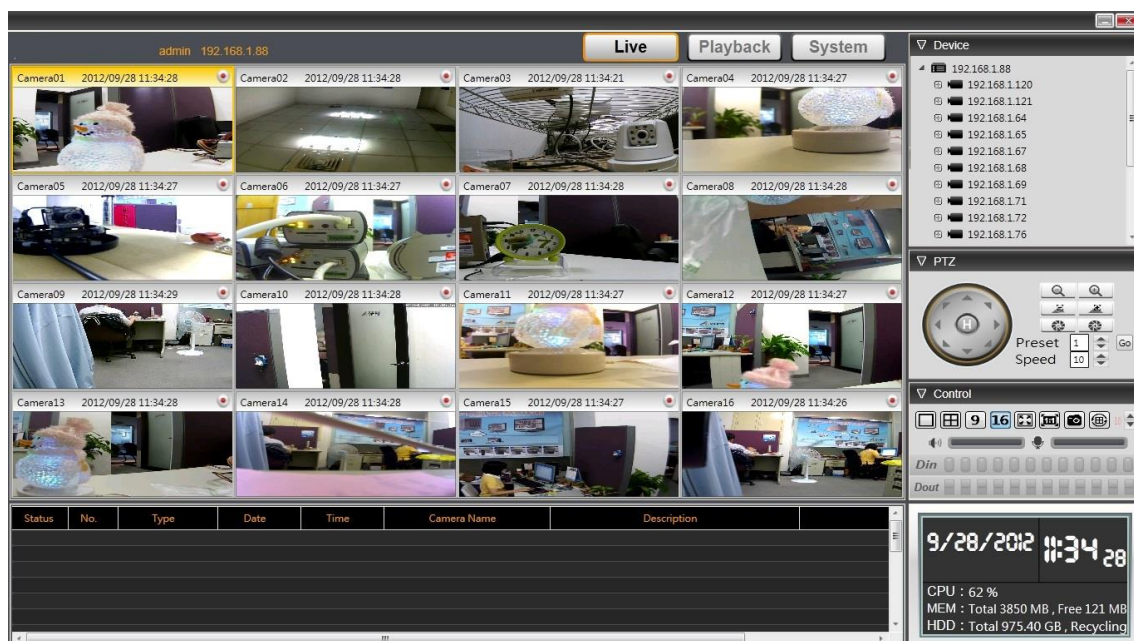
Live display screen



The entered NVR would be listed in the drop-down menu at the NVR Name field. You can select available NVR units from the drop-down menu during next time you log in and the system will fill in the related fields automatically and you only need to reenter the Password field to login your NVR unit.

4.2 Live Display Screen

Upon successful login, the live display screen will be shown.



System bar



In the system bar, you may see system information including the login user name, the address of the NVR unit you connect to and the following buttons:

Icon	Description
	Press to minimize Windows® remote client.
	Press to close Windows® remote client.
	Press to enter live display screen.
	Press to enter playback screen.
	Press to enter setup screen.

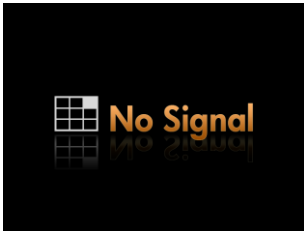
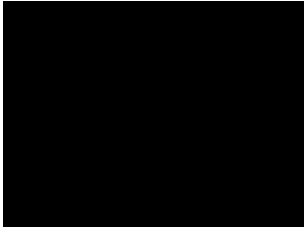
Camera view window



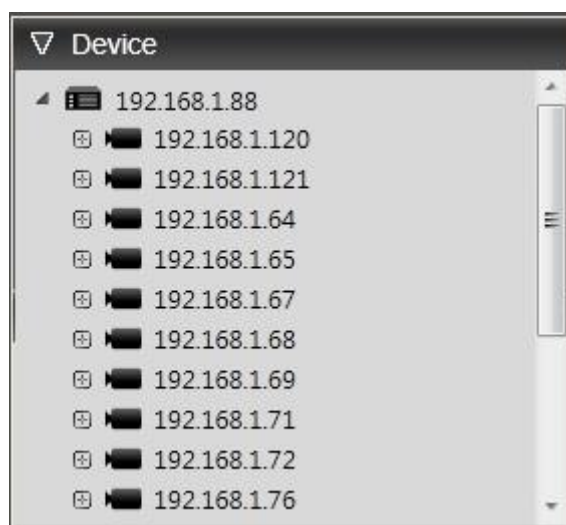
Camera view window displays camera title bar and its live video stream in a grid. The NVR supports different view modes for these grids, including single, quad, 9-split, 12-split, 16-split and 64-split view modes. Camera information will be shown on the camera title bar, it includes camera name, current date/time, motion alarm and recording status.

Icon	Description
	Camera is being recorded/not being recorded.
	Camera detects motion.

The camera title box and bounding box of camera view window will be shown in white color. It will change to orange color when it becomes as the focus window. Double-click left mouse button on a given grid will enlarge its size and double-click right mouse button on a given grid will reduce its size. The grid will show the live video stream of each IP camera in the normal case. The following background images will appear when abnormal status happens:

Image	Description
	This channel is trying to connect to IP camera.
	No response from IP camera. (Network failure or IP camera disconnected.)
	This channel is unused.

Device panel



Device panel shows all the connected devices of NVR. A device can be an NVR, IP camera or a network I/O module. The device node will be shown in red color in case of abnormal. Expanding each device will show subordinate devices, such as sensor input devices or alarm output devices on network I/O modules.

Icon	Description
	Normal/Abnormal NVR
	Normal/Abnormal IP camera
	Normal/Abnormal video server
	Normal/Abnormal video channel
	Normal/Abnormal network I/O module
	Normal/Abnormal sensor input device
	Normal/Abnormal alarm output device

Control panel

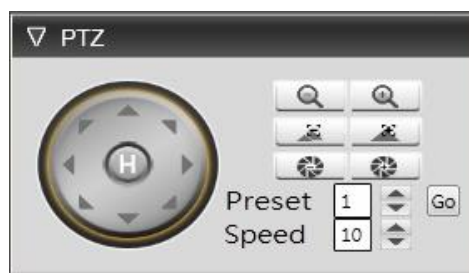


Control panel provides several buttons for control view mode and two-way audio. The status of network I/O modules is also displayed in panel. You can trigger outputs using this panel if network I/O module is connected.

Icon	Description
	Press to enter single view mode.
	Press to enter quad view mode.
9	Press to enter 9-split view mode.
12	Press to enter 12-split view mode.
16	Press to enter 16-split view mode.
	Press to enter full screen view mode.
	Press to show video in original aspect ratio.
	Press to take a snapshot from focus camera view window.
	Press to auto-switch camera views. Press Up/Down arrow to adjust the switch interval. (10 seconds as default, max. 30 seconds.)
	Listen to camera's audio, enter mute mode, volume up or volume down control.
	Talk to IP camera, volume up or volume down control.

	Din reflects instant sensor input device status.  /  stand for normal/abnormal status.
	Dout reflects instant alarm output device status.  /  stand for normal/abnormal status.

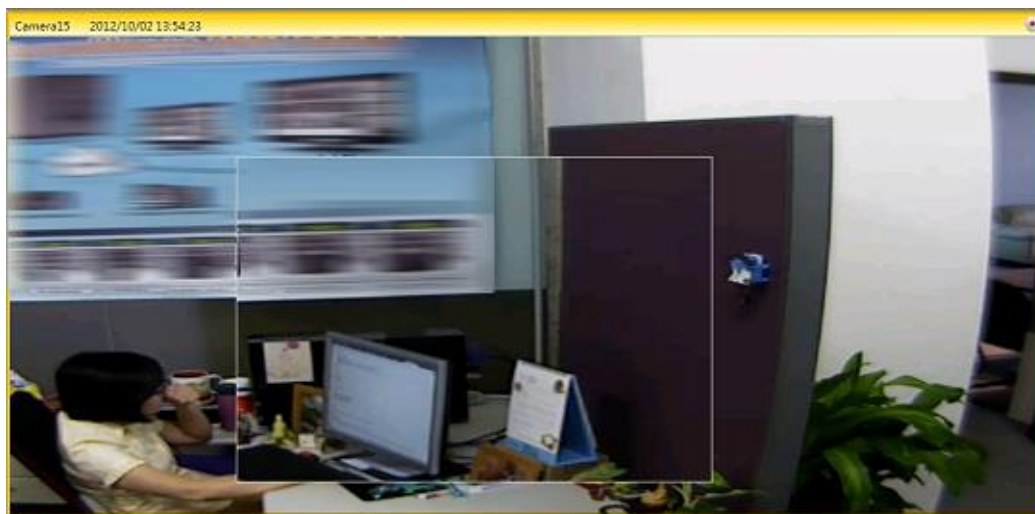
PTZ panel



For PTZ camera, PTZ panel can control the direction, focal lengths, focus, iris, go to preset and speed of camera. Through camera view window, you can see the live video when navigate PTZ cameras, adjust IRIS, Focus, zoom in and zoom out.

Icon	Description
	Press arrow ( ,  ,  ,  ,  ,  ,  ,  , or ) to adjust the TILT(up/down)/PAN(left/right) position. Press  to go the default position.
	Press  /  to zoom in/zoom out the PTZ.
	Press  /  to adjust the PTZ focus.
	Press  /  to adjust the PTZ iris.
Preset	Press Up/Down arrow to the preset point, and then press Go to the preset point.
Speed	Press Up/Down arrow to adjust the PTZ speed.

Digital magnifying glass



Digital magnifying glass allows you to zoom part of the video stream and enlarge it to display on the camera view window. Click and drag a highlight rectangle over a grid, move the rectangle to a interesting area using mouse and scroll the mouse wheel forward to zoom in and backward to zoom out. Right clicking on this grid will terminate the digital magnifying procedure.

Event panel

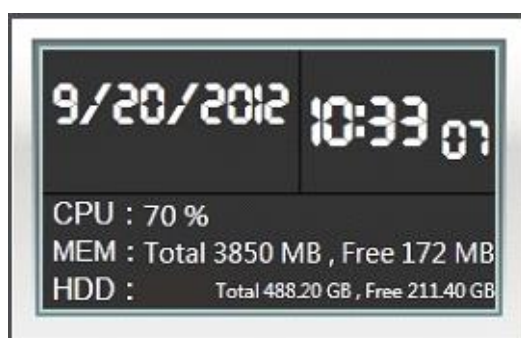
Status	No.	Type	Date	Time	Camera Name	Description
	7	Video Loss	10/3/2012	6:42:31 PM	頻道_60_RELAY	Camera60 Video Loss
	6	Video Loss	10/3/2012	6:42:30 PM	頻道_52_RELAY	Camera52 Video Loss
	5	Video Loss	10/3/2012	6:42:29 PM	頻道_44_RELAY	Camera44 Video Loss
	4	Video Loss	10/3/2012	6:42:28 PM	頻道_36_RELAY	Camera36 Video Loss
	3	Video Loss	10/3/2012	6:42:26 PM	頻道_28_RELAY	Camera28 Video Loss
	2	Video Loss	10/3/2012	6:42:24 PM	頻道_20_RELAY	Camera20 Video Loss
	1	Video Loss	10/3/2012	6:42:23 PM	頻道_16_RELAY	Camera16 Video Loss

Event panel shows latest events from the NVR or its connected IP cameras, with their status, type, date/time, camera name, description and device IP information. New events are constantly appended to the top of the list and old events will be removed from the list.

Icon	Description
	Alarm happen and still exist
	Alarm happen but disappeared

Currently supported event types include video motion, digital input, camera disconnected, video loss, storage full, hard disk failure, abnormal recording, backup failure, system boot-up, system shutdown and system configuration changed events.

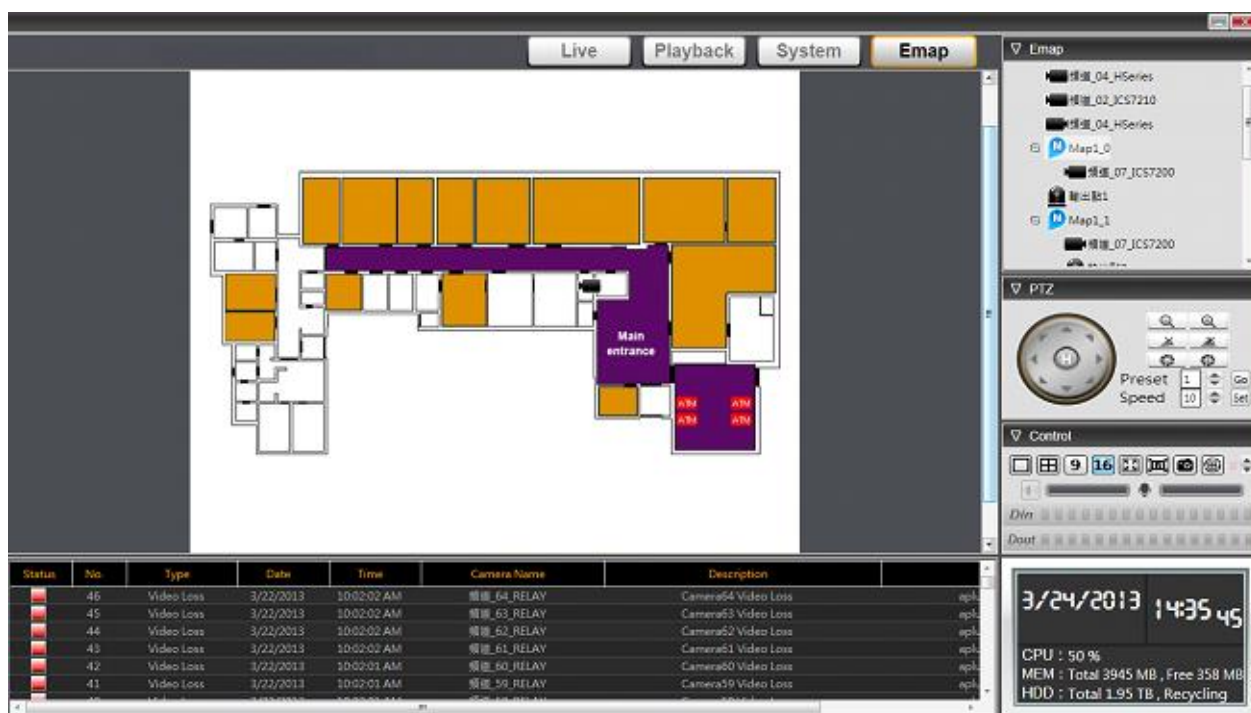
LED panel



The LED panel shows the current date/time, CPU usage, memory usage, HDD mode and status.

4.3 Emap Screen

Emap screen allows you to specify a multiple layers of maps to display the locations of NVRs, IP cameras and network I/O modules so administrator can have an idea of where a device is located and their current status. The device icons will be shown as red color on the map and Emap panel when an event is triggered. For a camera device, click camera icon will pop up associated live video window for live surveillance.



Emap panel shows all the connected maps and devices of NVR. A device can be an Emap, NVR, IP camera or a network I/O module. The device node will be shown in red color in case of

abnormal. Expanding each device will show subordinate devices, such as sensor input devices or alarm output devices on network I/O modules.

Icon	Description
	Normal/Abnormal Map
	Normal/Abnormal NVR
	Normal/Abnormal IP camera
	Normal/Abnormal video server
	Normal/Abnormal video channel
	Normal/Abnormal network I/O module
	Normal/Abnormal sensor input device
	Normal/Abnormal alarm output device

4.4 Playback Screen

Most of the functions are the same as those seen in live display screen, but there are some differences in the playback screen.

Playback screen



Search panel

There are several different types of search methods that can be performed on the NVR unit. The basic one is timeline search involves selecting the date, camera, time and then play.

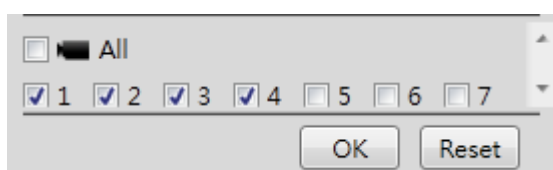
14. Select Time Line search from the drop-down menu within the search panel.



15. Click the Calendar button  to pop up or pop down a calendar for selecting a date.



16. Select one, more or all cameras.



17. Click OK to begin search.

Time line panel

Select a time by dragging the red bar or clicking the left and right arrows to the right of the time display.



The  and  icons can zoom in and out the timeline scale.

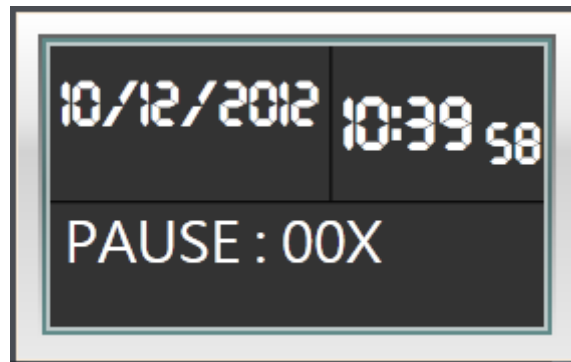
And then the video can be played forwards, backwards, or frame-by-frame as following:

Playback control



Icon	Description
	Press to increase backward speed at 1x, 2x, 4x, 8x and 16 x speeds.
	Press to back one I-frame.
	Press to rewind recorded video.
	Press to pause recorded video.
	Press to play recorded video.
	Press to forward one frame.
	Press to increase forward speed at 1x, 2x, 4x, 8x and 16 x speeds.

LED panel



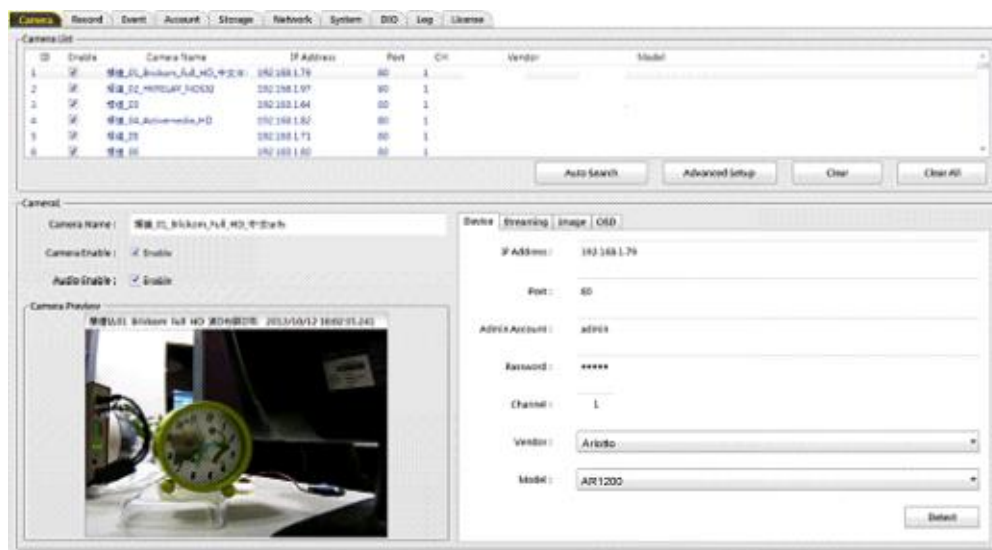
The LED panel will show the playback date/time and the play control information when in playback screen.

Chapter 5 Advanced System Setup

The Windows remote client allow you to optimize your NVR unit by adjusting settings like camera, record, event, account, storage, network, system, DIO, log and license. It is extremely important that you setup your NVR correctly.

5.1 Camera Setup

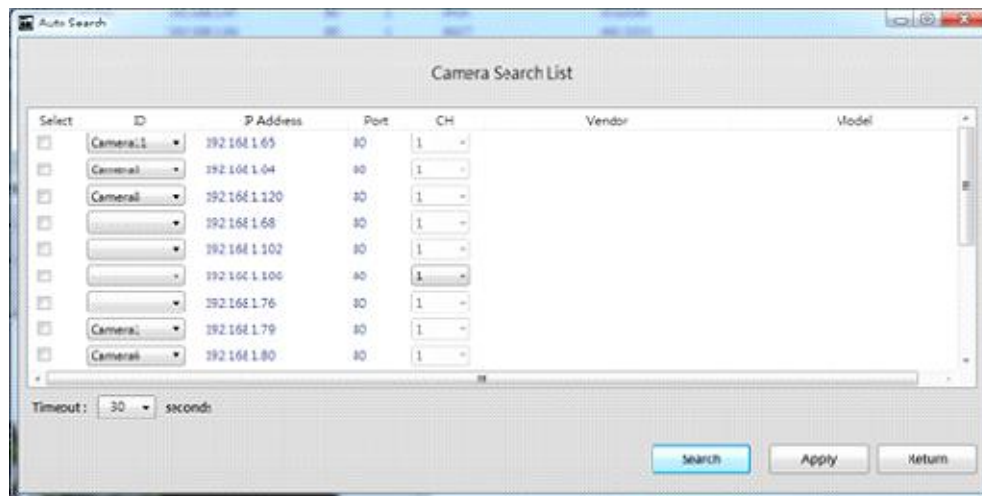
Camera setup page



Cameras can be added to Camera List in two ways: automatic or manual.

Automatic add camera

18. Click Auto Search button to bring up the Auto Search popup.



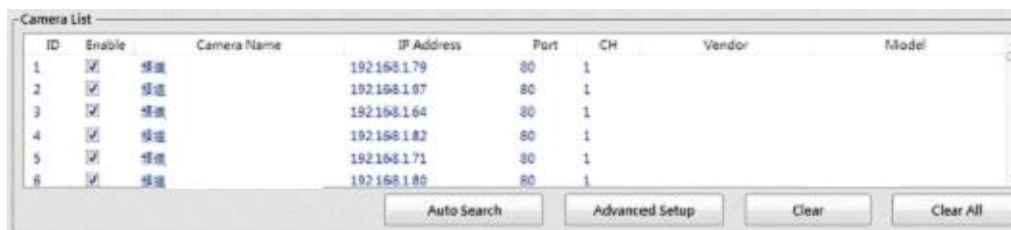
19. Click Search button to list all the currently available cameras.

20. Select the check box next to the desired camera.

21. Specified the channel ID (of video server) for the desired camera.

22. Click Apply button to apply the change or Return button to cancel the change.

23. Click an available camera on the Camera List.



24. Enter the Admin Account and Password.

Device Streaming Image OSD

IP Address : 192.168.1.97

Port : 80

Admin Account : admin

Password :

Channel : 1

Vendor : ARLOTTO

Model :

Detect

Apply Cancel

25. Click Apply button to apply the change or Cancel button to cancel the change.

Manual add cameras

1. Click a desired camera on the Camera List.
2. Enter the Camera Name.



3. Check Camera Enable and Audio Enable to active the video and audio channel
4. Enter the IP Address and Port on the Device Column.
5. Enter the Admin Account and Password.
6. Select the Vendor and Model for your IP camera or click Detect button to obtain it automatically.
7. Click Apply button to apply the change or Cancel button to cancel the change.

Camera streaming setting

It defines how IP camera videos should be streamed to NVR unit. Most IP cameras are capable of providing multiple video streams at the same time. We call those video streams as stream profile. Steam profile defines which video codec (H.264, MPEG-4 or MJPEG), resolution, frame rate, bit rate/quality will be pulled from the IP camera. The available stream profiles will vary by camera. By default, NVR pull only one stream (NVR stream 1) from IP camera. If stream 2 is checked then secondary stream will be pulled. You can specify different stream profiles for NVR stream 1 and NVR stream 2 here. This can be helpful when recording (stream 1) and live view (stream 2) is to be done in different stream profiles for optimizing.

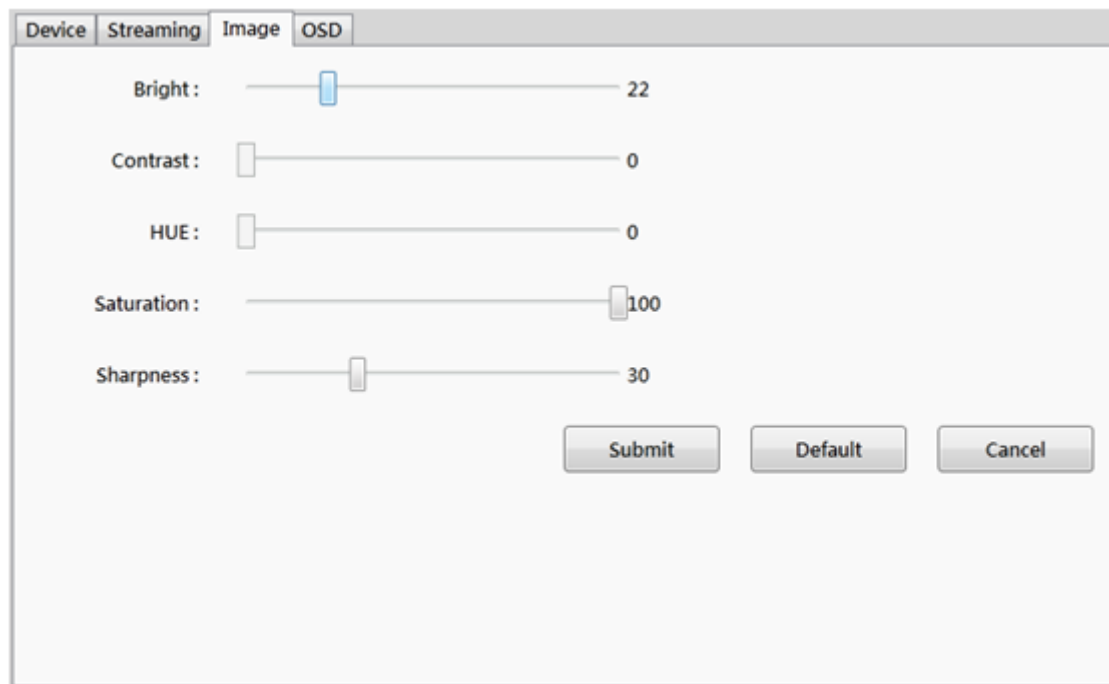
The screenshot shows a configuration window for NVR Streaming. It has four tabs: Device, Streaming (selected), Image, and Motion. Inside the Streaming tab, there are two sections: 'NVR Stream 1' and 'NVR Stream 2'. 'NVR Stream 2' is disabled with a greyed-out checkbox. The 'NVR Stream 1' section contains the following settings:

- IPCam Stream Profiles :** A dropdown menu showing 'Profile 1'.
- Video Codec :** Three radio buttons: 'H.264' (selected), 'MPEG4', and 'MJPG'.
- Resolution :** A dropdown menu showing '1280x1024'.
- Frame Rate(FPS) :** A dropdown menu showing '15'.
- Max Bitrate(Kbits/sec) :** A dropdown menu showing '0'.
- Quality :** A dropdown menu showing 'Very High'.

At the bottom right of the 'NVR Stream 1' section, there are two buttons: 'Refresh' and 'Submit'.

10. Select a stream profile from the stream profiles drop-down menu for NVR Stream 1.
11. Change the default video codec (H.264, MPEG-4 or MJPEG), resolution, frame rate, bit rate/quality setting if needed. Click Submit button to save your changes to IP camera.
Note: The available values will vary by camera.
12. Click Apply button to apply the change or click Cancel button to cancel the change.
13. Check NVR Stream 2 tab if needed.
14. Select a stream profile from the stream profiles drop-down menu for NVR Stream 2.
15. Change the default video codec (H.264, MPEG-4 or MJPEG), resolution, frame rate, bit rate/quality setting if needed. Click Submit button to save your changes to IP camera.
Note: The available values will vary by camera.
16. Click Apply button to apply the change or click Cancel button to cancel the change.

Camera image setting



Clicking the Image tab and then adjust the following sliders to change the camera image:

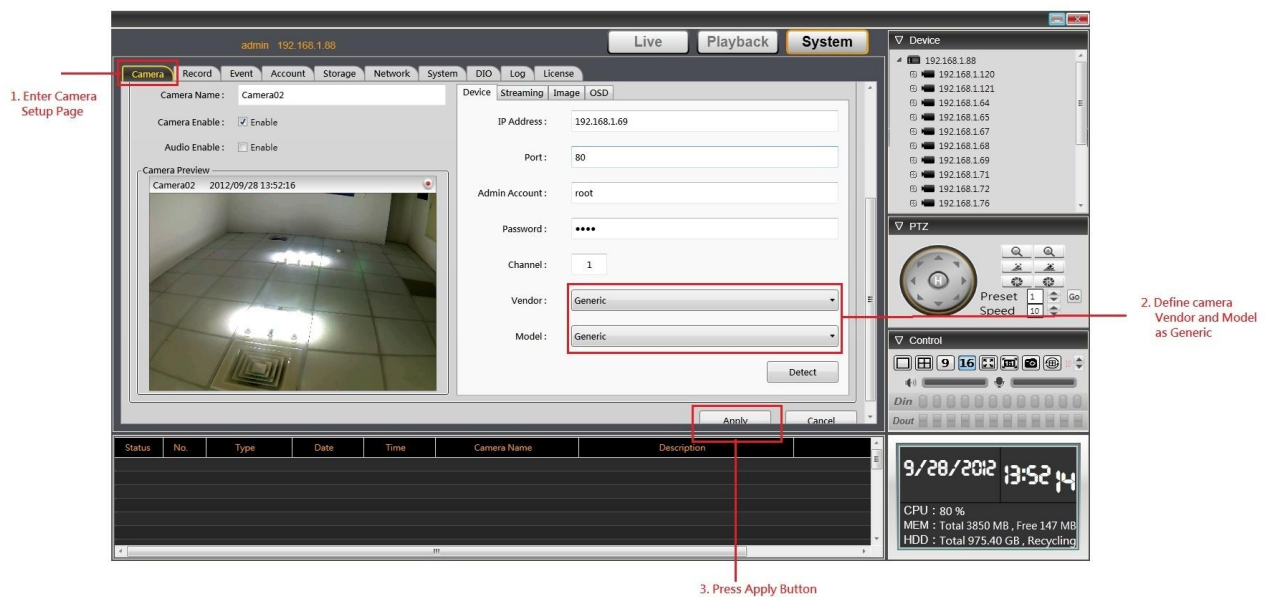
11. Bright: move the Bright slider bar to the right or left to adjust the brightness.
12. Contrast: move the Contrast slider bar to the right or left to adjust the lighting difference between dark and light areas of the image.
13. Hue: move the Hue slider bar to the right or left to adjust the color cast of the image.
14. Saturation: move the Saturation slider bar to the right or left to adjust the overall color intensity of the image.
15. Sharpness: move the Sharpness slider bar to the right or left to adjust the edge contrast of the image.
16. Click Submit button to save your changes to IP camera.
17. Click Default button to reset it to IP camera's default.
18. Click Cancel button to cancel the change.
19. Click Apply button to apply the change or click Cancel button to cancel the change.

Define a generic RTSP IP camera

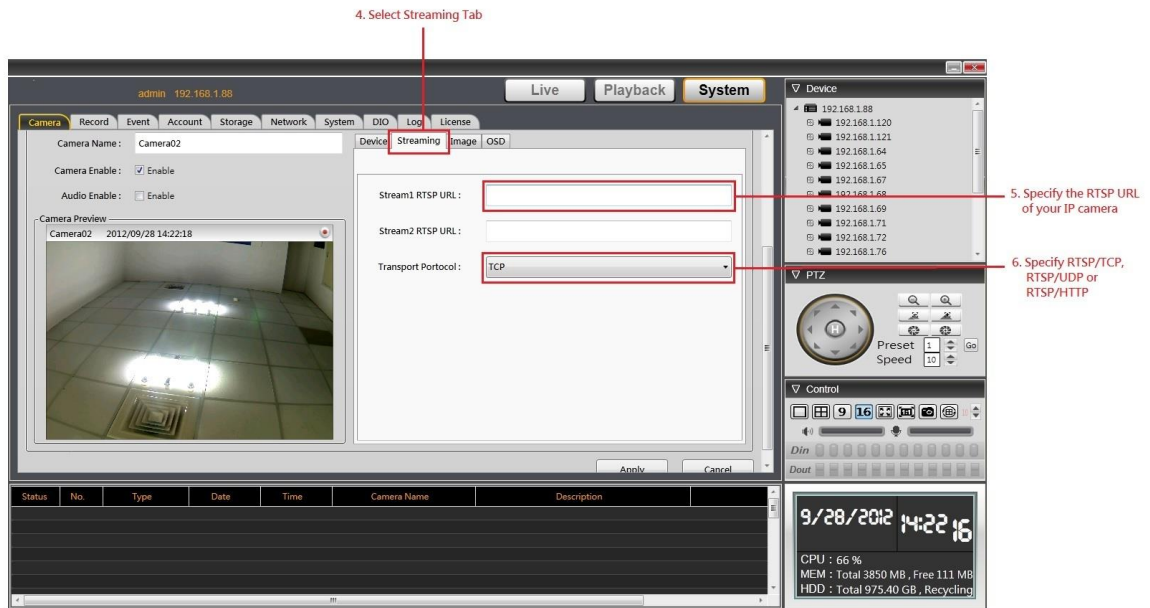
RTSP is the most popular video streaming protocol for IP camera, therefore we provides an interface for the users to enter the RTSP URL of IP cameras in order to receive the RTSP video streaming data from the IP cameras and live view, record, and playback the video of the IP cameras on the NVR.

The setup procedure is as following:

1. Select camera setup page.
2. Select a Camera within Camera List area.
3. Enter the Camera Name
4. Enter IP address, Port, Admin Account and Password.
5. Define your camera Vendor and Model as “Generic”.
6. Click Apply button to apply the change or click Cancel button to cancel the change.



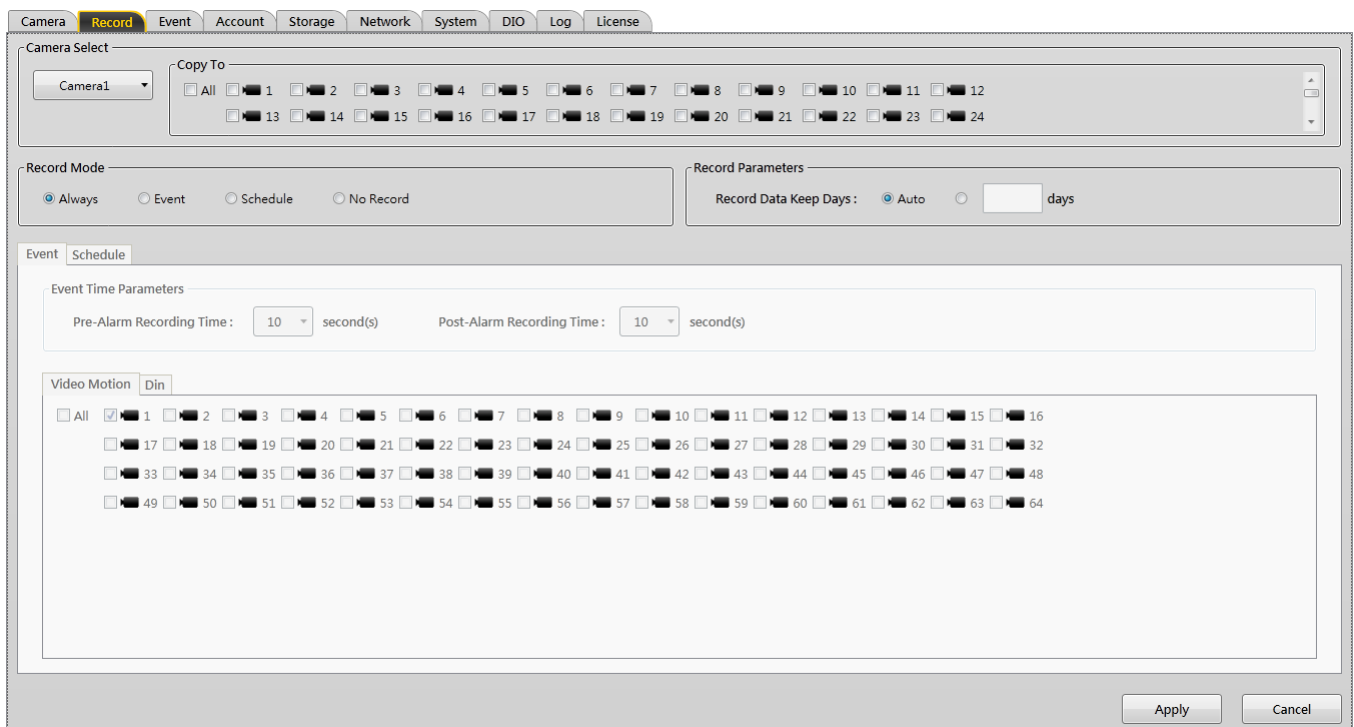
7. Select Streaming Tab.
8. Specify the RTSP URL for your IP camera.
9. Specify the transport protocol (TCP, UDP or HTTP).
10. Click Apply button to apply the change or click Cancel button to cancel the change.



5.2 Record Setup

The record setup page allows you to create different recording schedules based on the day, time, and type of recording desired.

Record setup page



1. Select a camera for recording.

The 'Camera Select' interface includes a dropdown menu currently set to 'Camera1'. To its right, the 'Copy To' section contains a grid of checkboxes for selecting other cameras, labeled from 1 to 24. Each checkbox is accompanied by a small camera icon.

2. Select Copy To Cameras for copy current settings to other cameras.
3. Select Always, Event, Schedule or No Record mode.

The 'Record Mode' section features four radio buttons for selection: 'Always' (which is currently selected), 'Event', 'Schedule', and 'No Record'.

Note: For event record mode, the camera will begin recording when NVR detects motion o from cameras (can be the same or other cameras) or digital input of network I/O modules.

4. Specify how many days of record data are going to be kept in storage, which will not be removed when recycling record data.

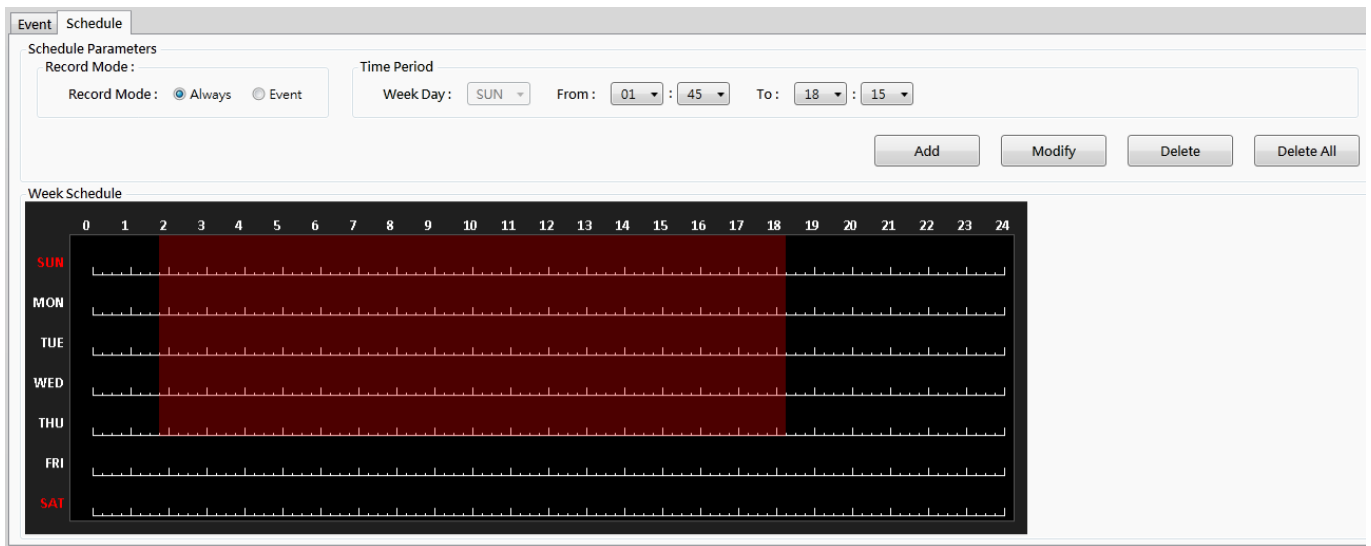
The 'Record Parameters' section shows the 'Record Data Keep Days' setting. The 'Auto' radio button is selected, and there is an empty text input field followed by the word 'days'.

5. Event record mode:
Specify Pre-Alarm Recording time (maximum 30 seconds), Post-Alarm Recording time (maximum 30 seconds) and event sources (motion or digital input).

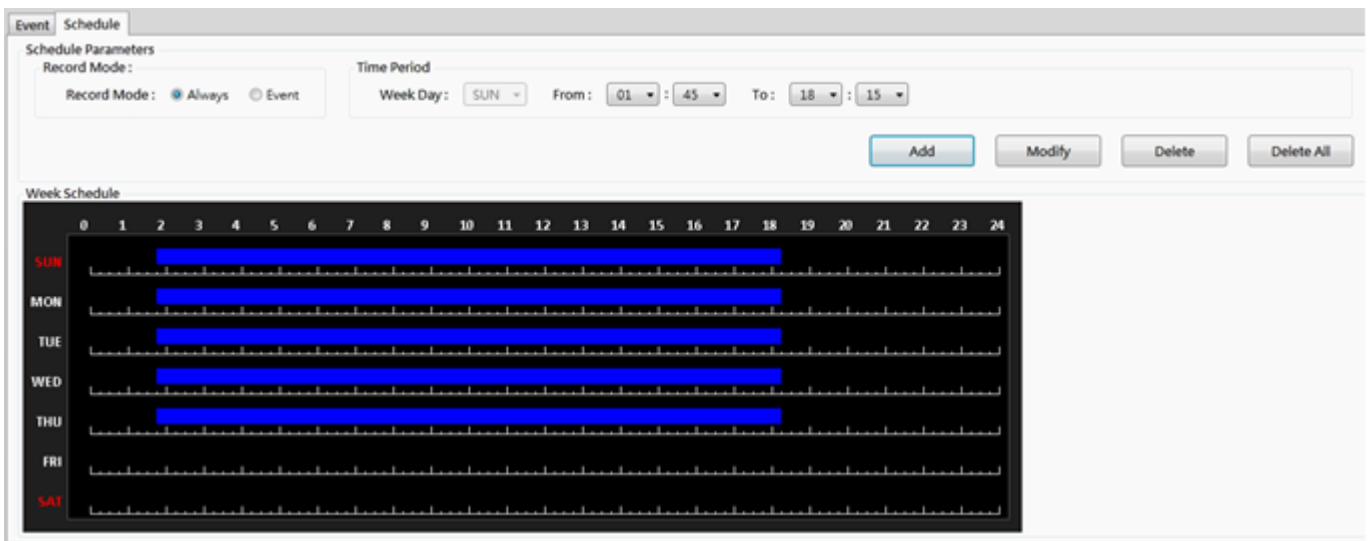
The interface shows two tabs: 'Event' and 'Schedule'. Under the 'Event' tab, the 'Event Time Parameters' section has 'Pre-Alarm Recording Time' and 'Post-Alarm Recording Time' both set to 10 seconds. Below this, the 'Video Motion' sub-tab is active, displaying a grid of checkboxes for selecting event sources, numbered 1 through 64. Checkboxes 1 and 2 are currently checked.

6. Schedule record mode:

Press left mouse button, drag a red rectangle over the Week Schedule area to specify a week day/time frame and then release the mouse button.



Click the Add button to fill blue bars within the time frame for recording.



Click any blue bar (the blue bar will be shown with yellow border), click the Modify button and then change from / to time for schedule modification.

Click any blue bar (the blue bar will be shown with yellow border), click the Delete button to remove the schedule.

Click the Delete All button to remove all schedules.

7. Click Apply button to apply the change or click Cancel button to cancel the change.

5.3 Event Setup

The NVR unit can handle events of various types. They can be video motion, camera disconnected, video loss and digital input, but also system events like storage full, hard disk failure, abnormal recording, backup failure, system boot-up, system shutdown and system configuration changed events.

Event setup page

Camera Record **Event** Account Storage Network System DIO Log License

Event Setup List

Select	Event Type	Source	Start Time	End Time	Action
☐	Video Motion	Camera1	02:00	18:00	Log, Dout,
☐	Video Motion	Camera2	00:00	24:00	Log, Email,
☐	Video Motion	Camera3	00:00	24:00	Log,
☐	Video Motion	Camera4	00:00	24:00	Log,
☐	Video Motion	Camera10	00:00	24:00	Log,

Add Modify Delete Delete All Cancel

Event Setup

Event Type: Video Motion

Source: Camera1

Schedule

☐ Enable:

Start Time 00 : 00 End Time 00 : 00

Action

☐ Log ☐ Dout ☐ Email

☐ Enable

Apply Cancel

Add an event

1. Click Add button.

Event Setup List

Select	Event Type	Source	Start Time	End Time	Action
☐	Video Motion	Camera1	02:00	18:00	Log, Dout,
☐	Video Motion	Camera2	00:00	24:00	Log, Email,
☐	Video Motion	Camera3	00:00	24:00	Log,
☐	Video Motion	Camera4	00:00	24:00	Log,
☐	Video Motion	Camera10	00:00	24:00	Log,

Add Modify Delete Delete All Cancel

2. Select the Event Type from the drop-down menu.

The screenshot shows a software interface for configuring an event. It is divided into three main sections: 'Event Setup', 'Schedule', and 'Action'.
- In the 'Event Setup' section, 'Event Type' is a dropdown menu currently showing 'Video Motion', and 'Source' is a dropdown menu showing 'Camera1'.
- The 'Schedule' section contains an 'Enable' checkbox, which is currently unchecked. Below it are 'Start Time' and 'End Time' fields, each consisting of two dropdown menus for hours and minutes, both currently set to '00 : 00'.
- The 'Action' section has three checkboxes: 'Log', 'Dout', and 'Email', all of which are unchecked. Below these is a large 'Enable' checkbox, which is also unchecked.

3. Select the Source in case of video motion, camera disconnected, video loss and digital input events.
4. Enable the Schedule and specify the start/end time if the event can only be triggered within specified time.
5. Specify the event actions including event log, digital output (the delay time and duration time can be specified) and email alert with attached recording video (the clip length can be specified).
6. Click Apply button to apply the change to Event Setup List or click Cancel button to cancel the change.

Modify an event

1. Select an Event Setup on the Event Setup List column.
2. Click Modify button
3. Modify the Schedule and Action columns setting.
4. Click Apply button to apply the change to Event Setup List or click Cancel button to cancel the change.

Delete an event or Delete all events

1. Select an Event Setup on the Event Setup List column.
2. Click Delete button or Delete All button
4. Click Apply button to apply the change to Event Setup List or click Cancel button to cancel the change.

5.4 Account Setup

The account setup is set to provide individual user role-based permissions, including access rights on specific channels while live view, playback, export, backup, PTZ control, DI/DO control, password change, Emap access, view/change setup. You can setup user accounts with different permissions. The NVR supports four types user account:

Account setup page

Select	Name	Type	Enable	Camera Access
☐	admin	Admin	☒	all
☐	canlive	User	☒	1,2,3,4
☒	cathy	User	☒	1,2,3,9,10,11,17,18,19,25,33
☐	derek	User	☒	1,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23

Account Info

User Name :

Password :

Reconfirm :

Type : ☐ Admin ☐ Power User ☒ Account ☐ Guest

Enable : ☒ Enable

Idle Client Timeout Period : seconds

Privilege

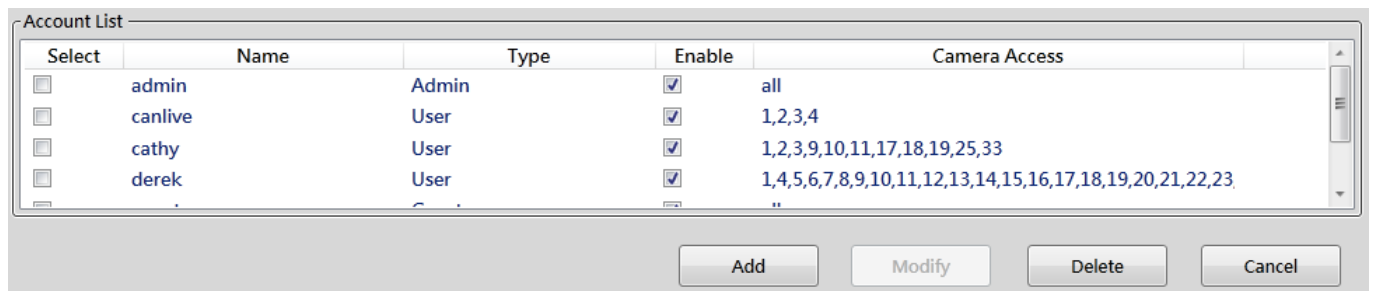
Camera Access ☐ all

Access Right

1. Administrator: the administrator account is “admin”. (Default password: 1234). It has the rights of live view, playback and setup. The admin account cannot be deleted. They have the rights to create and delete super users, normal users and guest users, and change their passwords.
2. Power user: power users can be granted the same rights as administrator or just be granted partial administrator rights. They can be deleted by administrator.
3. Normal user: normal users can be granted the rights of live view, playback, change password and view setup. They have no administration authority.
4. Guest user: guest users can be granted the rights as normal users except the right of change password.

Add a user

1. Click Add button.

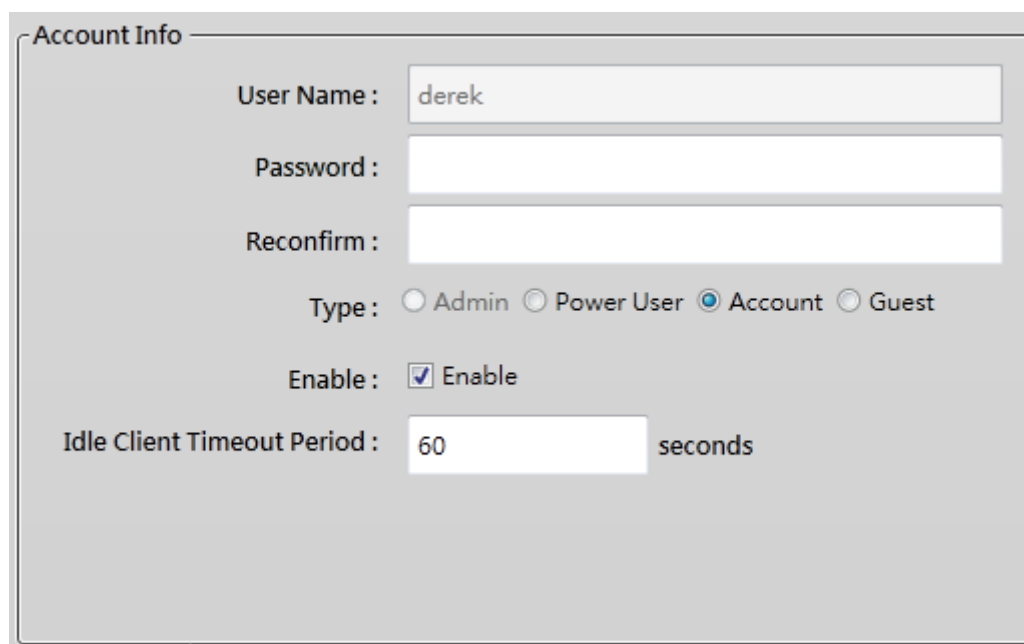


The 'Account List' window displays a table with the following columns: Select, Name, Type, Enable, and Camera Access. The table contains four rows of user data.

Select	Name	Type	Enable	Camera Access
☐	admin	Admin	☒	all
☐	canlive	User	☒	1,2,3,4
☐	cathy	User	☒	1,2,3,9,10,11,17,18,19,25,33
☐	derek	User	☒	1,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23

At the bottom of the window are four buttons: Add, Modify, Delete, and Cancel.

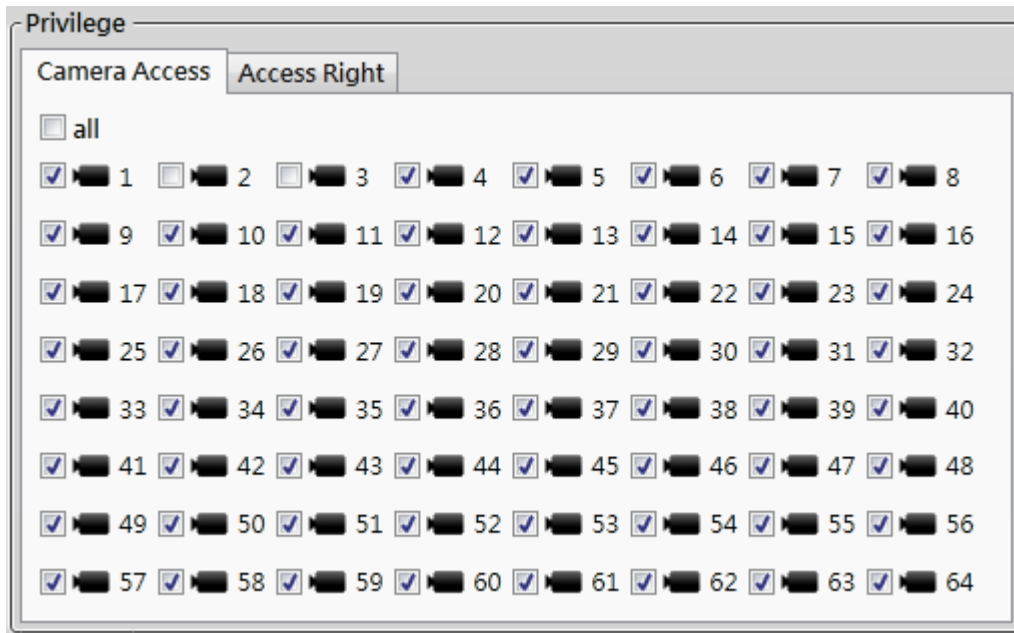
2. Fill in User Name, Password, Reconfirm (password must be typed twice for confirmation purposes), Type (administrator, power user, normal user or guest user), Enable (check this box to enable this account), and idle client timeout period (disconnected if remote client idle more than this period) information for the new account.



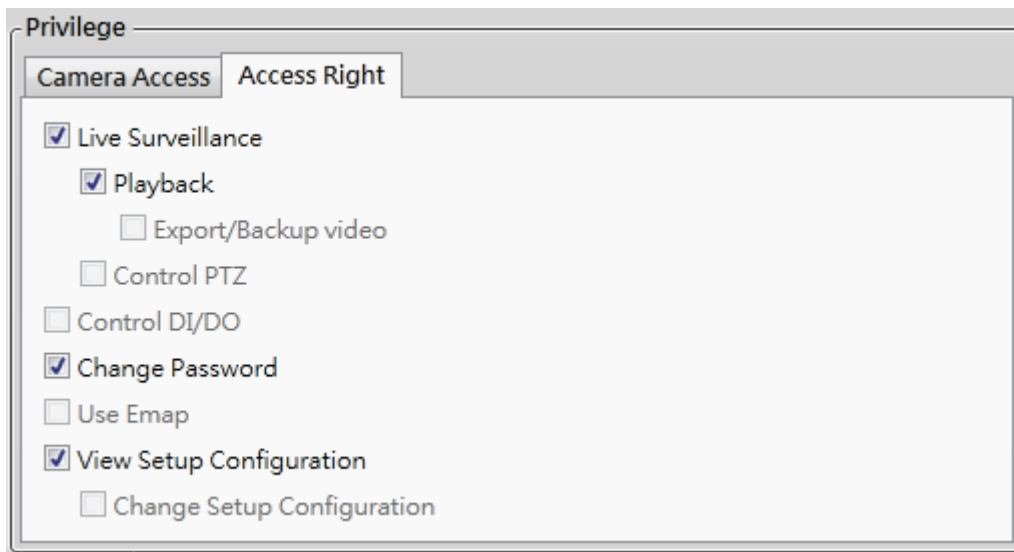
The 'Account Info' window contains the following fields and options:

- User Name :
- Password :
- Reconfirm :
- Type : ☐ Admin ☐ Power User ☒ Account ☐ Guest
- Enable : ☒ Enable
- Idle Client Timeout Period : seconds

3. Select channels that the user has access rights.



- Specify the permissions for specified channels including live view, playback, export, backup, PTZ control, DI/DO control, password change, Emap access, view/change setup for the specified channels.



- Click Apply button to apply the change to Account List or click Cancel button to cancel the change.

Modify a user

- Select a user on the Account List column.
- Click Modify button.
- Modify the related account information setting.

- Click Apply button to apply the change to Account List or click Cancel button to cancel the change.

Delete a user

- Select an user on the Account List column.
- Click Delete button.
- Click Apply button to apply the change to Account List or click Cancel button to cancel the change.

5.5 Storage Setup

Storage setup page shows all information related to HDD Drives installed on the NVR, it including:

- HDD mode: RAID or non-RAID mode (independent HDD mode).

The RAID level depends on the number of HDD installed if in RAID mode:

HDD number	Mode
1-2	NO RAID
3-8	RAID-5

Storage setup page

Camera Record Event Account **Storage** Network System DIO Log License

Status **SMART**

Mode: Non-RAID

Disk No.	Status	Capacity	Free Size
Disk1	OK	476.27 GB	0.98 GB

Summary

Total Capacity: 476.27 GB

RAID

Mode: ☐ RAID ☒ Non-RAID

☒ Auto-Format ☒ Record Recycle

Apply Cancel

Note:

- A. RAID is short for redundant array of independent (or inexpensive) disks. It is a category of disk drives that employ two or more drives in combination for fault tolerance and performance.
 - B. RAID-5 (Block Interleaved Distributed Parity): Level 5 provides data striping at the byte level and also stripe error correction information. This results in excellent performance and good fault tolerance.
-
- 2. Show all installed hard disks, their status, capacity and free size.
 - 3. The summary column will show the total storage capacity, status and RAID rebuild progress in case of rebuild RAID.

Change HDD mode

- 1. Select independent mode or RAID mode.
- 2. Check Auto-Format to format any new installed or crashed HDD when boot NVR.
- 3. Check Record Recycle to enable recycling record data if HDD full.
- 4. Click Apply button, the system will reboot immediately to apply the change or click Cancel button to cancel the change.

HDD SMART

Select a HDD tab to monitor the health, temperature, and status of the hard disk drives by the S.M.A.R.T. (Self-Monitoring, Analysis, and Reporting Technology).

Information	
Model : Hitachi HTS547550A9E384	
Serial Number : J2110051J2LUYA	
User Capacity : 500,107,862,016 bytes [500 GB]	
Health Status : PASSED	
Attributes	
RawRead_Error_Rate : 0	G-SenseError_Rate : 0
ThroughputPerformance : 0	Power-OffRetract_Count : 24
SpinUp_Time : 1	LoadCycle_Count : 305
StartStop_Count : 73	TemperatureCelsius : 48 (Min/Max 25/63)
ReallocatedSector_Ct : 0	ReallocatedEvent_Count : 0
SeekError_Rate : 0	CurrentPending_Sector : 0
SeekTime_Performance : 0	OfflineUncorrectable : 0
PowerOn_Hours : 1583	UDMACRC_Error_Count : 0
SpinRetry_Count : 0	LoadRetry_Count : 0
PowerCycle_Count : 73	

5.6 Network Setup

Network setup page

Camera Record Event Account Storage **Network** System DIO Log License

Basic Setup

Host Name:

Port

HTTP Port:

Streaming Port:

Others

☒ Enable SSH

☒ Enable UPnP

TCP/IP Setup

☒ Dual-IP ☐ Load Balancing ☐ Fail-over

Eth0 **Eth1**

☐ DHCP ☒ Static IP ☐ PPPoE

IP Address:

Netmask:

Gateway:

Primary DNS Server:

Secondary DNS Server:

☐ Maximum Outgoing Bandwidth: Kbps

Others

DDNS SMTP

☒ Enable

Domain Name:

Provider:

User Name:

User Password:

Sync Period:

Apply Cancel

To connect NVR to LAN or Internet, you need to:

9. Enter the NVR Host Name, HTTP port (default is 80), Streaming port (default is 8888)

Basic Setup

Host Name:

Port

HTTP Port:

Streaming Port:

Others

☒ Enable SSH

☒ Enable UPnP

10. Enable SSH (for remote maintenance purpose).

11. If your NVR has two Ethernet ports, make sure both Ethernet ports are connected to the network first and then select dual-IP, Load Balancing or Fail-over mode for the TCP/IP setting:

TCP/IP Setup

☒ Dual-IP
 ☐ Load Balancing
 ☐ Fail-over

Eth0
 Eth1

☐ DHCP
 ☒ Static IP
 ☐ PPPoE

IP Address : 192.168.1.106
 Netmask : 255.255.255.0
 Gateway : 192.168.1.1
 Primary DNS Server : 192.168.1.1
 Secondary DNS Server : 168.95.1.1

☐ Maximum Outgoing Bandwidth : Kbps

- D. Dual-IP: assign different IP settings for each Ethernet channel.
 - E. Load-Balancing: aggregating two Ethernet channels together to form a single channel for network traffic sharing.
 - F. Fail-over: aggregating two Ethernet channels together to form a single channel for redundancy in Ethernet paths.
12. Select one of the following mechanisms to configure the Ethernet channels (eth0, eth1) of NVR:
- D. DHCP IP setting: obtain IP Address, Netmask, Gateway, Primary DNS Sever and Secondary DNS Server automatically via DHCP server (the IP Address and Netmask will default to 192.168.1.200, 255.255.255.0 for eth0 and 192.168.1.201, 255.255.255.0 for eth1 in case of no DHCP server existed)
 - E. Static IP Setting: configure IP Address, Netmask, Gateway, Primary DNS Sever and Secondary DNS Server manually.
 - F. PPPoE setting: Enter User Name and Password provided by ISP. The system will return the IP assigned by ISP in case of dialup successfully.
13. Specify Maximum Outgoing Bandwidth to restrict the amount of outgoing bandwidth of NVR uses.
14. DDNS(Dynamic Domain Name Server) allows you to connect NVR with dynamic IP address. You can refer to http://www.no-ip.com/services/managed_dns/free_dynamic_dns.html and register an account, and then:

Others

DDNS SMTP

☒ Enable

Domain Name : xxxxxxxxxx.com

Provider : NO-IP.com

User Name : xxxxxxxxxx

User Password :

Sync Period : 1minute ▼

- i. Enter your account in User Name field.
- ii. Enter your password in User Password field.
- iii. Select the Sync Period to setup interval for IP/DDNS synchronization.
- iv. The domain name field will return your DDNS name assigned by no-ip when connect successfully.

15. Configure your SMTP here to send event notifications to the E-mail address specified in Event:

The image shows a configuration window titled 'Others' with two tabs: 'DDNS' and 'SMTP'. The 'SMTP' tab is selected. It contains the following fields:

- SMTP Server : xxxxxxx.com
- User Name : derek
- User Password : •••••
- From Address : xxxxxxxxxxxx

- i. Enter your SMTP server.
- ii. Enter User Name of SMTP server
- iii. Enter User Password of SMTP server
- iv. Enter the sender address of event notifications

16. Click Apply button to apply the change or click Cancel button to cancel the change.

5.7 System Setup

System setup page is used to show system information, modify time zone/system time, backup data, control local console and system maintenance.

Show System Information

Information	Time	Backup	SPOT	Management
Model :				
Firmware Version : 1.0.1				
Camera Capacity : 64				
MAC Address(1) : 00:25:90:34:2e:62				
MAC Address(2) : 00:25:90:34:2e:63				
System Temperature : N/A				
System Memory : 3946 M				
CPU Temperature : N/A				
CPU Fan Speed : N/A				
CPU Usage : 98%				

The system information tab shows the following items.

- Model
- Firmware Version
- Camera Capacity
- MAC Address
- System Temperature
- System Memory
- CPU Temperature
- CPU Fan Speed
- CPU Usage

Modify Time Zone/System Time

Information Time Backup SPOT Management

Time Zone/Calendar

October, 2012

Su	Mo	Tu	We	Th	Fr	Sa
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3
4	5	6	7	8	9	10

TimeZone: (UTC+08:00) 台北

Time: 21 hours 58 minutes 30 seconds

Date Format: DD/MM/YYYY

Apply Time

Time Sync

☐ Manual ☒ NTP ☐ Rdate

Time Server1: tock.stdtime.gov.tw

Time Server2:

Time Server3:

Time Server4:

Time Server5:

Sync Period: 00 hours 30 minutes

Logs

1. Select current Time Zone from the drop-down menu.
2. Specify current year, month and day from the calendar.
3. Specify current time and click Apply Time button to apply the change. (the default time is set according to the real-time clock on server.
4. Select the mechanism for time sync. (sync with an Internet NTP or Rdate time server automatically.
5. Enter the IP address or the domain name of the NTP or Rdate server in the Time Server 1 – Time Server5 field and fill in the sync period. (NVR can be configured as the NTP server for the IP cameras or other servers. To ensure the date and time of the IP cameras are synchronized with the NVR, enter the NVR IP as the NTP server of the IP cameras.)
6. Click Logs button to retrieve the time sync log.
7. Click Apply button to apply the change or click Cancel button to cancel the change.

Backup Data

Camera Record Event Account Storage Network **System** DIO Log License

Information Time Backup **SPOT** Management

FTP

☒ Enable

FTP Server Address: 192.168.1.13

User Name: ftptest

Password: ••••••

Backup Path: nvr

Backup Capacity: 12 GBytes

Backup Start Time: 22 : 15

Backup Status: Backup Pause

Camera Select

☐ all

☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8

☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16

☐ 17 ☐ 18 ☐ 19 ☐ 20 ☐ 21 ☐ 22 ☐ 23 ☐ 24

☐ 25 ☐ 26 ☐ 27 ☐ 28 ☐ 29 ☐ 30 ☐ 31 ☐ 32

☐ 33 ☒ 34 ☐ 35 ☐ 36 ☐ 37 ☐ 38 ☐ 39 ☐ 40

☐ 41 ☐ 42 ☐ 43 ☐ 44 ☐ 45 ☐ 46 ☐ 47 ☐ 48

☐ 49 ☐ 50 ☐ 51 ☐ 52 ☐ 53 ☐ 54 ☐ 55 ☐ 56

☐ 57 ☐ 58 ☐ 59 ☐ 60 ☐ 61 ☐ 62 ☐ 63 ☐ 64

Apply Cancel

The NVR can backup recording video of previous day to ftp server as following:

1. Enter the IP address of FTP server.
2. Enter the User Name and Password.
3. Set up the Backup Path for backup files.
4. Enter the Backup Storage Capacity.
5. Enter the Start Time for backup
6. Select the cameras for backup
7. Click Apply button to apply the change or click Cancel button to cancel the change.

Local Console

The screenshot shows a software interface with a top menu bar containing tabs: Camera, Record, Event, Account, Storage, Network, System (highlighted), DIO, Log, and License. Below this is a sub-menu bar with tabs: Information, Time, Backup, SPOT, and Management. The main content area is divided into three sections:

- View:** Contains a checkbox for ☒ Enable. Below it are two fields: View Mode (set to 2x2) and Dwell Interval (set to 0 seconds).
- Event:** Contains a checkbox for Event Video (set to ☐ Enable) and a Dwell Interval field (set to 0 seconds).
- OSD:** Contains a checkbox for ☒ Enable. Below it are several checkboxes: All (☐) and Camera Name (☒) are in the first row; Video Motion (☐) and Bit Rate (☐) are in the second row; Time Stamp (☒) and Record (☐) are in the third row; Frame Rate (☐) is in the fourth row; and Audio (☐) is in the fifth row. At the bottom of this section is a Position dropdown menu set to Top.

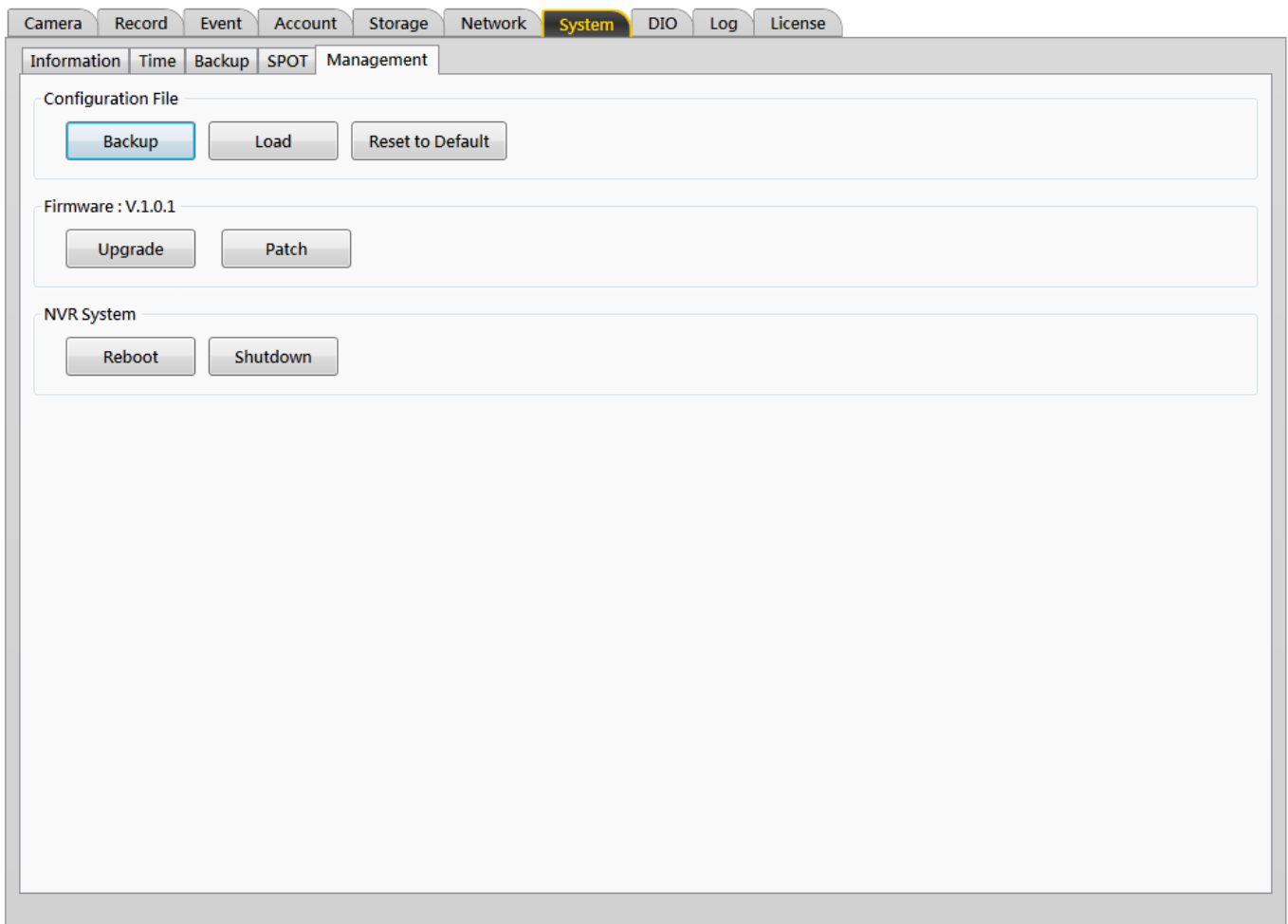
At the bottom right of the window are two buttons: Apply and Cancel.

The NVR can support VGA or HDMI output with 1920X1080 resolution. Windows client can perform some remote settings for local console, such as enable it, view mode/dwell interval, event video/dwell video and OSD.

1. Check Enable to enable local console.
2. Select View Mode. (default is 2X2)
3. Enter the Dwell Interval for auto switch.
4. Enable show Event Video when event triggered.
5. Enter the Dwell Interval for Event Video.
6. Check Enable to enable OSD. (default: checked)
7. Select the OSD position. (top or bottom)
8. Click Apply button to apply the change or click Cancel button to cancel the change.

System Maintenance

Windows client supports several remote NVR management features including: backup/restore configuration file, reset default configuration, upgrade firmware and reboot/shutdown NVR system.



Backup/Load Configuration

7. Click Backup/Load button.
8. Browse a destination/file for backup/load.
9. Click the OK button.
10. A confirmation dialog pops up.
11. Click the OK button to confirm and start backup/load.
12. After configuration load, the NVR will restart automatically.

Reset to Default Configuration

5. Click the Reset to Default button.
6. A confirmation dialog pops up.
7. Click the OK button to reset.
8. After configuration load, the NVR will restart automatically.

Upgrade firmware

3. Browse the firmware file for upgrading.
4. Click the OK button.
5. A confirmation dialog pops up.

- Click the OK button to confirm and start upgrade.
- After upgrade, the NVR will restart automatically.

5.8 DIO Setup

The NVR can handle the digital input/relay output devices via AP-SIO20 network I/O module. Digital input/alarm output devices are connected directly with AP-SIO20 network I/O module, and digital input/alarm output signals are converted to Ethernet through AP-SIO20 network I/O module.

DIO setup page

Camera Record Event Account Storage Network System **DIO** Log License

DIO List

Select	No.	IP Address	Din Port	Dout Port	Din #	Dout #	Model
☐	1	192.168.1.21	103	102	8	3	AP-SIO20

Add Modify Delete Delete All Cancel

DIO Info

Model: AP-SIO20

IP Address:

Din Port:

Dout Port:

Din Info

1		☐ NC ☒ NO
2		☐ NC ☒ NO
3		☐ NC ☒ NO
4		☐ NC ☒ NO
5		☐ NC ☒ NO
6		☐ NC ☒ NO
7		☐ NC ☒ NO
8		☐ NC ☒ NO

Dout Info

1		ON OFF
2		ON OFF
3		ON OFF

Apply Cancel

Add a network I/O module

1. Click Add button.

The screenshot shows a window titled "DIO List". It contains a table with the following data:

Select	No.	IP Address	Din Port	Dout Port	Din #	Dout #	Model
☐	1	192.168.1.21	103	102	8	3	AP-SIO20

Below the table are five buttons: "Add", "Modify", "Delete", "Delete All", and "Cancel".

2. Select Model of network I/O module from the drop-down menu.

The screenshot shows a window titled "DIO Info". It contains the following fields and sections:

- Model:** A drop-down menu showing "AP-SIO20".
- IP Address:** A text input field.
- Din Port:** A text input field.
- Dout Port:** A text input field.
- Din Info:** A section with 8 rows. Each row has a port icon, a text input field, and two radio buttons labeled "NC" and "NO". To the right of each row is a blue LED indicator.
- Dout Info:** A section with 3 rows. Each row has a relay icon, a text input field, and two buttons labeled "ON" and "OFF". To the right of each row is a blue LED indicator.

3. Specify the IP Address for network I/O module.
4. Specify the Din port (default is 103) and Dout port (default is 102).
5. Specify the name and NC/NO connection for each digital input device.(blue LED stand for normal status, red LED stand for abnormal status)
6. Specify the name for each relay output device and click ON/OFF button to turn on/turn off relay output device. (blue LED stand for turn off, red LED stand for turn on)
7. Click Apply button to apply the change to DIO List or click Cancel button to cancel the change.

Modify a network I/O module

1. Select a network I/O module on the DIO List column.
2. Click Modify button
3. Modify the DIO Info column setting.
4. Click Apply button to apply the change to DIO List or click Cancel button to cancel the change
- 5.

Delete a network I/O module or Delete all network I/O modules

1. Select an network I/O module on the DIO List column.
2. Click Delete button or Delete All button
3. Click Apply button to apply the change to DIO List or click Cancel button to cancel the change.

5.9 Log

The Log setup page shows recent event and login logs. In case of abnormal event or system malfunction, the logs can be searched to analyze the related events or system problems.

Log page

Search

Event Login

☐ All

☐ Video Motion All

☐ Din Triggered All

☐ Camera Disconnected All

☐ Video Loss All

Time Period

☐ Enable

Start Time 10/30/2012 15 00 : 00

End Time 10/30/2012 15 00 : 00

Search

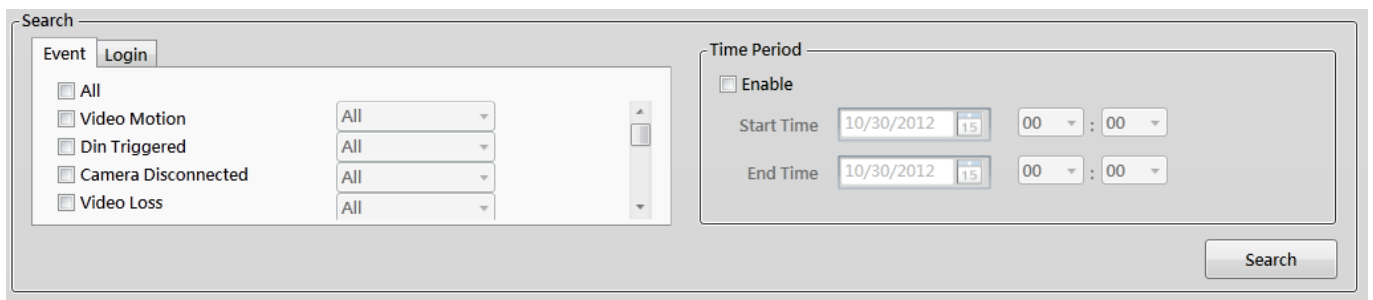
Log List

No.	Event Description	Start Time	End Time	Action
1	Camera57 Video Loss : 頻道_57_RELAY	10/30/2012 7:54:52 PM	10/30/2012 7:55:17 PM	Log
2	Camera59 Video Loss : 頻道_59_RELAY	10/30/2012 7:54:52 PM	10/30/2012 7:55:18 PM	Log
3	Camera62 Video Loss : 頻道_62_RELAY	10/30/2012 7:54:52 PM	10/30/2012 7:55:35 PM	Log
4	Camera64 Video Loss : 頻道_64_RELAY	10/30/2012 7:54:52 PM	10/30/2012 7:55:18 PM	Log
5	Camera46 Video Loss : 頻道_46_RELAY	10/30/2012 7:54:51 PM	10/30/2012 7:55:31 PM	Log
6	Camera47 Video Loss : 頻道_47_RELAY	10/30/2012 7:54:51 PM	10/30/2012 7:55:31 PM	Log
7	Camera48 Video Loss : 頻道_48_RELAY	10/30/2012 7:54:51 PM	10/30/2012 7:55:32 PM	Log
8	Camera49 Video Loss : 頻道_49_RELAY	10/30/2012 7:54:51 PM	10/30/2012 7:55:33 PM	Log
9	Camera51 Video Loss : 頻道_51_RELAY	10/30/2012 7:54:51 PM	10/30/2012 7:55:34 PM	Log
10	Camera54 Video Loss : 頻道_54_RELAY	10/30/2012 7:54:51 PM	10/30/2012 7:55:16 PM	Log
11	Camera56 Video Loss : 頻道_56_RELAY	10/30/2012 7:54:51 PM	10/30/2012 7:55:35 PM	Log
12	Camera32 Video Loss : 頻道_32_RELAY	10/30/2012 7:54:50 PM	10/30/2012 7:55:24 PM	Log
13	Camera33 Video Loss : 頻道_33_RELAY	10/30/2012 7:54:50 PM	10/30/2012 7:55:11 PM	Log
14	Camera35 Video Loss : 頻道_35_RELAY	10/30/2012 7:54:50 PM	10/30/2012 7:55:12 PM	Log
15	Camera38 Video Loss : 頻道_38_RELAY	10/30/2012 7:54:50 PM	10/30/2012 7:55:14 PM	Log

Log Per Page 15 Search Log : 50378 Total Log : 50378

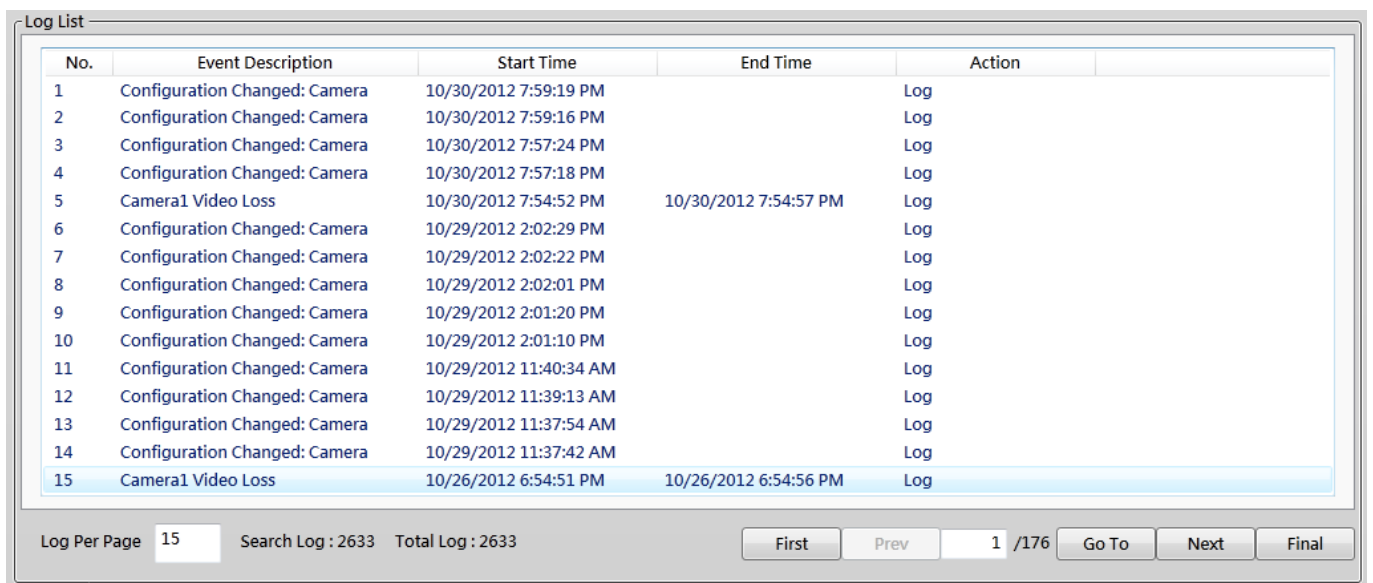
First Prev 1 / 3359 Go To Next Final

1. Select Event or Login log.



The search interface is divided into two main sections: 'Event' and 'Time Period'. The 'Event' section has two tabs: 'Event' and 'Login'. Under the 'Event' tab, there are five checkboxes: 'All', 'Video Motion', 'Din Triggered', 'Camera Disconnected', and 'Video Loss'. Each checkbox is followed by a dropdown menu, all of which are currently set to 'All'. The 'Time Period' section has an 'Enable' checkbox. Below it, there are two rows for 'Start Time' and 'End Time'. Each row contains a date field (set to 10/30/2012), a time field (set to 15:00), and a dropdown menu. A 'Search' button is located at the bottom right of the interface.

2. Specify Event Type (event types include video motion, digital input, camera disconnected, video loss, storage full, hard disk failure, abnormal recording, backup failure, system boot-up, system shutdown and system configuration changed events) or Login's username and source (local or remote).
3. Specify the search time range.
4. Click Search button will show the results in Log List column.



The Log List interface displays a table of log entries. The table has five columns: 'No.', 'Event Description', 'Start Time', 'End Time', and 'Action'. The table contains 15 rows of data. The first 14 rows are 'Configuration Changed: Camera' events, and the 15th row is a 'Camera1 Video Loss' event. The 'Action' column for all rows is 'Log'. Below the table, there is a 'Log Per Page' dropdown set to 15, a 'Search Log : 2633' label, and a 'Total Log : 2633' label. At the bottom, there are navigation buttons: 'First', 'Prev', '1 / 176', 'Go To', 'Next', and 'Final'.

No.	Event Description	Start Time	End Time	Action
1	Configuration Changed: Camera	10/30/2012 7:59:19 PM		Log
2	Configuration Changed: Camera	10/30/2012 7:59:16 PM		Log
3	Configuration Changed: Camera	10/30/2012 7:57:24 PM		Log
4	Configuration Changed: Camera	10/30/2012 7:57:18 PM		Log
5	Camera1 Video Loss	10/30/2012 7:54:52 PM	10/30/2012 7:54:57 PM	Log
6	Configuration Changed: Camera	10/29/2012 2:02:29 PM		Log
7	Configuration Changed: Camera	10/29/2012 2:02:22 PM		Log
8	Configuration Changed: Camera	10/29/2012 2:02:01 PM		Log
9	Configuration Changed: Camera	10/29/2012 2:01:20 PM		Log
10	Configuration Changed: Camera	10/29/2012 2:01:10 PM		Log
11	Configuration Changed: Camera	10/29/2012 11:40:34 AM		Log
12	Configuration Changed: Camera	10/29/2012 11:39:13 AM		Log
13	Configuration Changed: Camera	10/29/2012 11:37:54 AM		Log
14	Configuration Changed: Camera	10/29/2012 11:37:42 AM		Log
15	Camera1 Video Loss	10/26/2012 6:54:51 PM	10/26/2012 6:54:56 PM	Log

5.10 License

Register a license to have more channel capacity for NVR. (Max. 64 channels for each NVR)
Licenses can be registered to NVR in two ways: online and offline.

License page

Serial Number	Camera Capacity	Status
0869aa31767143be	4	Registered
0c52e43d05c29cdc	16	Registered
71152c6d52ff7cf4	64	Registered
5555555555555555	40	Registering
6451fa31762a63c1	4	Registering
5de34c31146373c7	4	Registered

License Info

☐ Online Register ☒ Offline Register

Serial Number : - - -

Host Info : - - -

Random Number : -

License Key : - - -

Online register

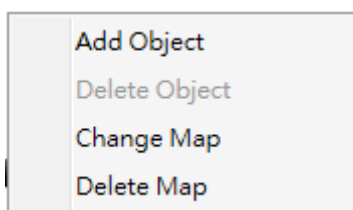
7. Select the Online Register on the License Info column.
8. Enter your Serial Number.
9. NVR will verify Host Info and Random Number and then obtain a License Key via Internet.
10. Click Apply button to register this license info.
11. System will reboot automatically if registered successfully.
12. The new License Info will be updated in License List.

5.11 Map

1. In the Map page, right-click the E-map at Map Area and select Add Map.
2. Select your top layer map. (The default name for top layer map is Map 0, you can rename it by right click the associated icon at Emap tree panel of right-top corner.)



3. Click Change Map to change map or Delete Map to delete map.
4. Place Camera, NVR, network I/O module, Din, Dout and Map to anywhere on the top layer map by right click on the top layer map and select Add Object.



5. Select an object type and then enter their name, source IP, index and icon.
6. Add a camera object:

Add Object

Object Type : Camera

Name :

Source IP : 192.168.1.156

Index : 1

Select Icon : 

Apply Cancel

7. Add a NVR object:

Add Object

Object Type : NVR

Name : nvr

Source IP : xxxx.no-ip.org

Select Icon : 

Apply Cancel

8. Add a network I/O module object:

Add Object

Object Type : Device

Name :

Source Device : 192.168.1.21

Select Icon : 

Apply Cancel

9. Add a Din object:

Add Object

Object Type : Din

Name :

Source Device : 192.168.1.21

Index : 1

Select Icon : 

Apply Cancel

10. Add a Dout object:

Add Object

Object Type : Dout

Name :

Source Device : 192.168.1.21

Index : 1

Select Icon : 

Apply Cancel

11. Add a sub-layer map object:

Add Object

Object Type : Map

Name : Map1_3

Select Icon : M

MapInfo

Map File :

Preview

Browse

Apply Cancel

12. Click Apply button to apply the change or click Cancel button to cancel the change.

admin - applusvideo.no-ip.org 1.1.5

Live Playback System Emap

Camera Record Event Account Storage Network System DIO Log License Map

Map Area

Apply Cancel

Status	No.	Type	Date	Time	Camera Name	Description
	46	Video Loss	3/24/2013	7:19:20 PM	摄像头_04_RELAY	Camera04 Video Loss
	45	Video Loss	3/24/2013	7:19:20 PM	摄像头_03_RELAY	Camera03 Video Loss
	44	Video Loss	3/24/2013	7:19:20 PM	摄像头_02_RELAY	Camera02 Video Loss
	43	Video Loss	3/24/2013	7:19:20 PM	摄像头_01_RELAY	Camera01 Video Loss
	42	Video Loss	3/24/2013	7:19:20 PM	摄像头_00_RELAY	Camera00 Video Loss
	41	Video Loss	3/24/2013	7:19:20 PM	摄像头_00_RELAY	Camera00 Video Loss

3/24/2013 20:53 08

CPU : 82 %
MEM : Total 3945 MB , Free 116 MB
HDD : Total 1.95 TB , Recycling

Chapter 6 CMS Client

The CMS client is a multiple NVRs management software. You can operate NVR units via CMS client to monitor, playback the connected NVRs, import multiple-layered maps which display the location of all NVRs, IP cameras, network I/O modules and digital input/output devices and manage the functions of the NVR systems. The powerful software can manage max. 16 NVRs, 256 IP cameras and were specifically designed as an enterprise solution.

The look and feel of CMS client is quite similar with NVR Windows® remote client. We'll mention the difference parts as below.

6.1 Login

Click the Start button -> NVR Client -> CMS Client at your Windows® desktop. When the client is up, you will see the following login window.

Login window



Login your CMS client by entering User Name, Password, Language and then OK begin using this unit. (Note: The default administrator: User Name is admin, Password is “1234”). After entering the correct information, you will see the live display screen within 10 seconds.

6.2 Live Display Screen

Please refer to section 4.2 for the details.

6.2 Emap Screen

Please refer to section 4.3 for the details.

6.3 Playback Screen

Please refer to section 4.4 for the details.

6.4 CMS Setup Page

NVR setup page

The screenshot shows the 'NVR' tab selected in a menu bar with 'Account', 'Event', and 'E-Map'. Below the menu is the 'NVR List' section containing a table with 8 columns: No., Name, IP, Port, CH#, Din#, and Dout#. The table lists three NVRs: NVR1 (192.168.1.102), NVR2 (192.168.1.90), and NVR3 (192.168.1.106). Below the table are buttons for 'Add', 'Modify', 'Delete', 'Auto Search', and 'NVR Setup'. The 'NVR Information' section contains input fields for 'NVR Name', 'IP Address', and 'Port' (set to 80). To the right, the 'NVR Capacity' section has dropdown menus for 'Channel Number' (4), 'Din Number' (0), and 'Dout Number' (0). 'Apply' and 'Cancel' buttons are at the bottom right.

No.	Name	IP	Port	CH#	Din#	Dout#
1	NVR1	192.168.1.102	80	4	0	0
2	NVR2	192.168.1.90	80	64	0	0
3	NVR3	192.168.1.106	80	64	16	6

NVR Information

NVR Name :

IP Address :

Port :

NVR Capacity

Channel Number :

Din Number :

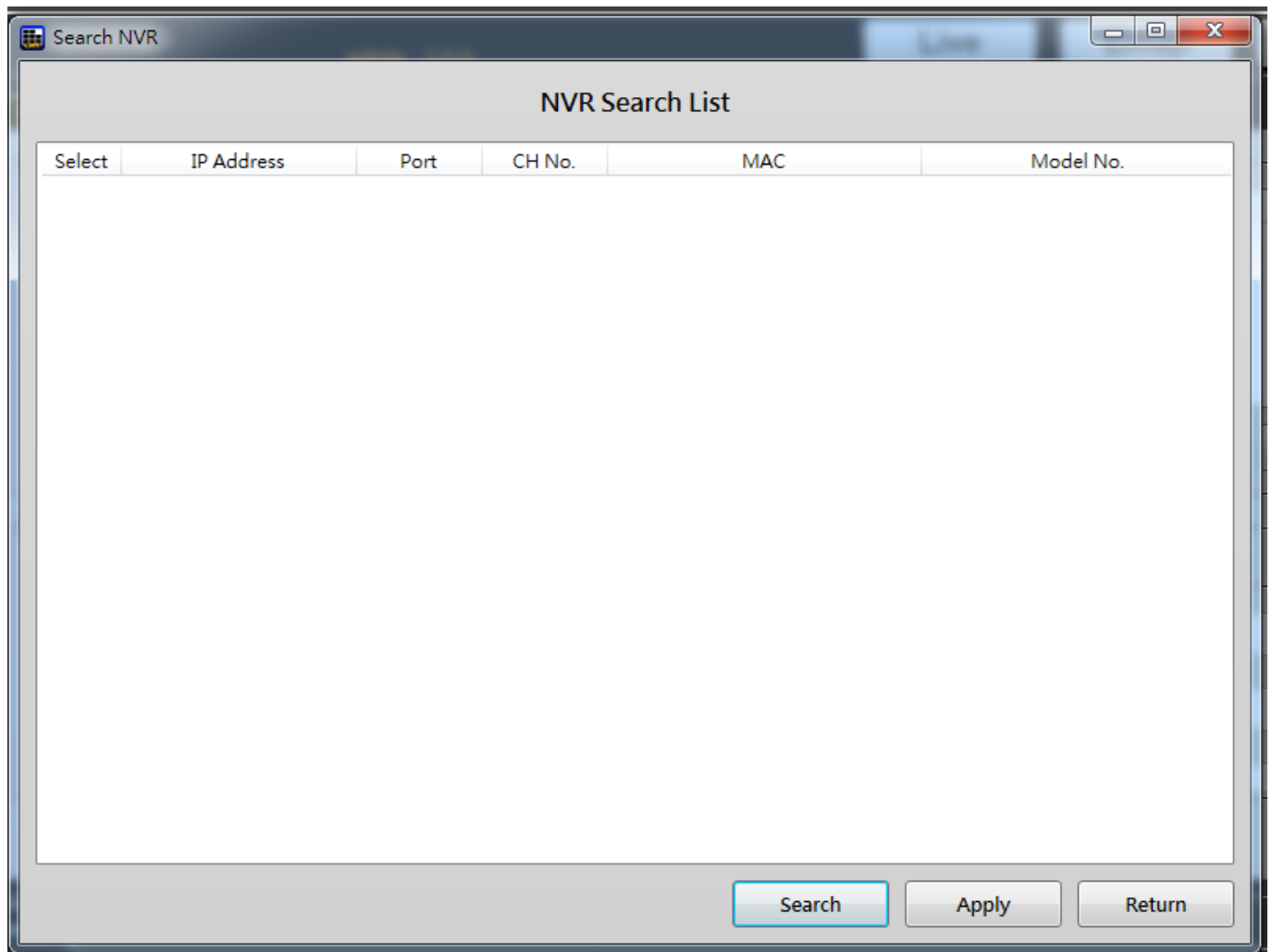
Dout Number :

Apply Cancel

NVRs can be added to NVR List in two ways: automatic or manual.

Automatic add NVR

1. Click Auto Search button to bring up the Search NVR popup.



2. Click Search button to list all the currently available NVRs.
3. Select the check box next to the desired NVR.
4. Click Apply button to apply the change or Return button to cancel the change.
5. Click an available NVR on the NVR List.
6. Click Apply button to apply the change or Cancel button to cancel the change.

Manual add NVRs

1. Click a desired NVR on the NVR List.
2. Enter the NVR Name.
3. Enter the IP Address and Port.
4. Enter the Login Name and Password.
5. Check Alarm Auto-report to enable the event report of associated NVR.
6. Enter the Channel Number, Din Number and Dout Number of NVR capacity column.
7. Click Apply button to apply the change or Cancel button to cancel the change.

Account setup page

The account setup is set to provide individual user role-based permissions, including access

rights on specific channels, Dins and Douts.

The screenshot shows a software interface with a top navigation bar containing 'NVR', 'Account', 'Event', and 'E-Map'. The 'Account' tab is selected. Below the navigation bar is the 'Account List' section, which contains a table with the following data:

No.	Name	Type	NVR#	CH#	Din#	Dout#
1	admin	Admin	3	132	16	6

Below the table are three buttons: 'Add', 'Modify', and 'Delete'. Below the 'Account List' section is the 'Account Information' section. It shows a tree view with 'NVR3' expanded, displaying a list of channels from 01 to 64, each with a checkbox. The first row of channels (01-16) is selected. At the bottom right of the 'Account Information' section are 'Apply' and 'Cancel' buttons.

Add a user

1. Click Add button.
2. Fill in User Name, Password.
3. Select NVR that the user has access rights.
4. Specify the permissions for specified channels, Dins and Douts.
5. Click Apply button to apply the change to Account List or click Cancel button to cancel the change.

Modify a user

5. Select a user on the Account List column.
6. Click Modify button.
7. Modify the related account information setting.
8. Click Apply button to apply the change to Account List or click Cancel button to cancel the change.

Delete a user

4. Select n user on the Account List column.
5. Click Delete button.
6. Click Apply button to apply the change to Account List or click Cancel button to cancel the change.

Event setup page

The event setup page shows recent event logs. In case of abnormal event or system malfunction, the logs can be searched to analyze the related events or system problems.

NVR		Account		Event		E-Map	
☒ Search Condition							
Start Time :		Select a date		15	: 00	:	00
End Time :		◀ March, 2013 ▶			: 00	:	00
						☐ NVR1 ☐ Video Motion	☐ Camera1
Search							
Event List							
Event D		End Time		NVR	Device Name	IP	
Su Mo Tu We Th Fr Sa 24 25 26 27 28 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6							
Total Logs : 0							
Page Records :		25		First Page Previous Page Next Page Last Page		Page :	1 Go

1. Check the Search Condition.
2. Specify the Start Time and End Time for search time range.
3. Specify NVR unit and Event type (event types include video motion, digital input, camera disconnected, video loss, storage full, hard disk failure, abnormal recording, backup failure, system boot-up, system shutdown and system configuration changed events) and camera number.
4. Specify the search time range.
5. Click Search button will show the results in Event List column.

Please refer to section 5.11 for the details.